For Research Use Only

MBL
A JSR Life Sciences Company

Epitope Tag Antibodies
Product Catalog

Wide range of product variation!

MEDICAL & BIOLOGICAL LABORATORIES CO., LTD.

Table of Contents

Abbreviation

aff.: affinity purified
WB: Western blotting, IP: Immunoprecipitation, FCM: Flow cytometry, IC: Immunocytochemistry, IH: Immunohistochemistry,
IF: Immunofluorescence, RIP: RNP Immunoprecipitation, ChIP: Chromatin Immunoprecipitation,
Co-IP: Co-Immunoprecipitation, DB: Dot Blotting, NB: Northern Blotting, RNA FISH: RNA Fluorescence *in situ* Hybridization
*: Reported in articles, but not tested in MBL. For more details please check the datasheet.

Japanese High Quality Antibodies

Wide range of product variation, from antibodies to purification kits!

Tag Antibodies

Antigen Target	Antibody	Agarose	Biotin	HRP DirecT Series ▶ P.22 ～	Alexa Fluor® Labeled Antibodies	Magnetic Beads *Smart-IP* Series ▶ P.24 ～	Magnetic Agarose *Smart-IP* Series ▶ P.24 ～	Purification Kit	
								Agarose ▶ P.26 ～	Magnetic Beads ▶ P.29 ～
DDDDK ▶P.4	×	×	×	×	×	×	×	×	×
HA ▶P.5	×	×	×	×	×	×	×	×	×
His ▶P.7	×	×	×	×	×	×	×	×	
Myc ▶P.9	×	×	×	×	×	×	×	×	×
V5 ▶P.10	×	×	×	×		×	×	×	×
mini-AID ▶P.12	×								
GFP ▶P.13	×	×	×	×	×	×	×		
***Renilla* GFP** ▶P.14	×								
RFP ▶P.15	×	×		×		×	×		
S ▶P.18	×								
E ▶P.18	×					×	×		
T7 ▶P.18	×	×							
VSV-G ▶P.18	×	×							
GST ▶P.18	×			×					
Luciferase ▶P.19	×								
***Renilla* Luciferase** ▶P.19	×								

Go to page 18-21 for more tag antibodies!

β-galactosidase, MBP, Trx (Thioredoxin), CBD,
CBP (Calmodulin Binding Protein), Ash-tag, Glu-Glu-tag,
Strep-tagII, HSV-tag, Digoxigenin (DIG), FITC

HRP-DirecT : HRP is directly labeled to the antibodies for Western blotting.
Smart-IP : Antibody-conjugated magnetic beads or magnetic agaroses enabled easy and effective immunoprecipitation of tagged proteins.
Purification kits : Use antibody-conjugated agaroses or magnetic beads for protein purification

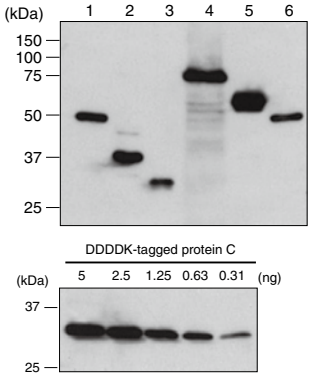
DDDDK-tag

Code No.	Description	Clone	Isotype	Applications	Size
M185-3L	Anti-DDDDK-tag mAb	FLA-1	Mouse IgG2aκ	WB, IP, FCM, IC	1 mg/1 mL
M185-3LL	Anti-DDDDK-tag mAb	FLA-1	Mouse IgG2aκ	WB, IP, FCM, IC	1 mg/1 mL x5
M185-3S	Anti-DDDDK-tag mAb	FLA-1	Mouse IgG2aκ	WB, IP, FCM, IC	50 μg/50 μL
M185-6	Anti-DDDDK-tag mAb-Biotin	FLA-1	Mouse IgG2aκ	WB, ELISA	50 μL
M185-7	Anti-DDDDK-tag mAb-HRP-DirecT HRP-DirecT	FLA-1	Mouse IgG2aκ	WB	200 μL
M185-10	Anti-DDDDK-tag mAb-Magnetic Agarose Smart-IP	FLA-1	Mouse IgG2aκ	IP	100 tests (Gel: 1 mL)
M185-11	Anti-DDDDK-tag mAb-Magnetic Beads Smart-IP	FLA-1	Mouse IgG2aκ	IP	20 tests (Slurry: 1 mL)
M185-A48	Anti-DDDDK-tag mAb-Alexa Fluor® 488 Alexa Fluor®	FLA-1	Mouse IgG2aκ	FCM, IC	100 μg/100 μL
M185-A59	Anti-DDDDK-tag mAb-Alexa Fluor® 594 Alexa Fluor®	FLA-1	Mouse IgG2aκ	IC	100 μg/100 μL
M185-A64	Anti-DDDDK-tag mAb-Alexa Fluor® 647 Alexa Fluor®	FLA-1	Mouse IgG2aκ	FCM, IC	100 μg/100 μL

High sensitivity and high affinity. Can be used in a wide variety of applications.

Applications: WB: 0.1 μg/mL (M185-3S, 3L, 3LL)
1:2,000 (M185-6)
1:2,000-1:5,000 (M185-7)
IP: 2 μg/sample (M185-3S, 3L, 3LL)
10 μL/sample (M185-10)
50 μL/sample (M185-11)
FCM: 0.05 μg/mL (M185-3S, 3L, 3LL)
0.5 μg/mL (M185-A48, A64)
IC: 0.1 μg/mL (M185-3S, 3L, 3LL)
0.5-1 μg/mL (M185-A48, A,59, A64)
ELISA: 1:2,000 (M185-6)
Specificity: Proteins fused with DDDDK-tag, DYKDDDDK, at *N*-terminal, Internal, and *C*-terminal.

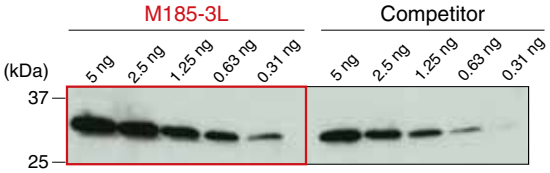
■ Western blotting (M185-3L)



Lane 1: *N*-terminal Met-DDDDK-tagged protein A
Lane 2: *N*-terminal DDDDK-tagged protein B
Lane 3: Internal DDDDK-tagged protein C
Lane 4: Internal DDDDK-tagged protein D
Lane 5: *C*-terminal DDDDK-tagged protein E
Lane 6: *C*-terminal DDDDK-tagged protein F

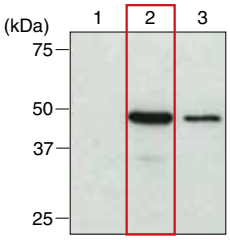
Met: Methionine

■ Western blotting (M185-3L)



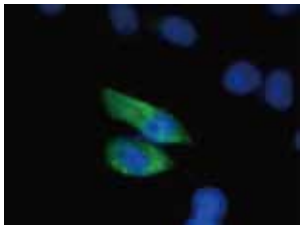
Sample: Internal DDDDK-tagged GFP

■ Immunoprecipitation (M185-3L)



Lane 1: Isotype control
Lane 2: M185-3L
Lane 3: Competitor
Sample: *N*-terminal DDDDK-tagged BAP

■ Immunocytochemistry (M185-3L)



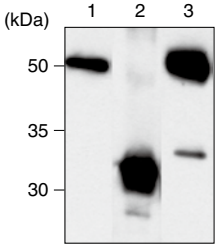
Green: M185-3L
Blue: DAPI counter stain
Cells: DDDDK-tagged protein/HeLa cells

Code No.	Description	Clone	Isotype	Applications	Size
PM020	Anti-DDDDK-tag pAb	Polyclonal	Rabbit Ig (aff.)	WB, IP, IC	100 μL
PM020-7	Anti-DDDDK-tag pAb-HRP-DirecT HRP-DirecT	Polyclonal	Rabbit Ig (aff.)	WB	100 μL
PM020-8	Anti-DDDDK-tag pAb-Agarose Agarose	Polyclonal	Rabbit Ig (aff.)	IP	Gel: 200 μL

Reacts with *N*-terminal, Internal, and *C*-terminal.

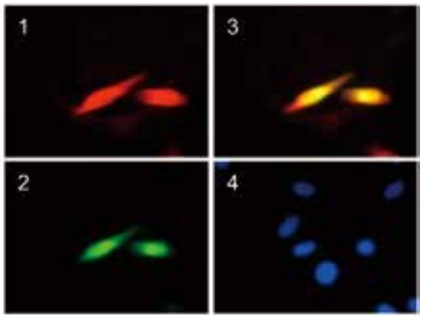
Applications: WB: 1:1,000 (PM020)
1:1,000-1:4,000 (PM020-7)
IP: 5 μL/sample (PM020)
20 μL/sample (PM020-8)
IC: 1:1,000 (PM020)
Specificity: Proteins fused with DDDDK-tag, DYKDDDDK, at *N*-terminal, Internal, and *C*-terminal.

■ Western blotting (PM020)



Lane 1: *N*-terminal DDDDK-tagged protein
Lane 2: Internal DDDDK-tagged protein
Lane 3: *C*-terminal DDDDK-tagged protein

■ Immunocytochemistry (PM020)



1: Anti- DDDDK-tag pAb (PM020)
2: GFP own fluorescence
3: Merge, 1 and 2
4: DAPI
DDDDK-tagged GFP expressed in HeLa

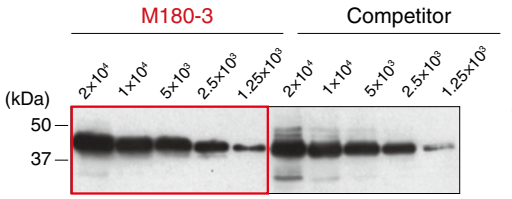
HA-tag

Code No.	Description	Clone	Isotype	Applications	Size
M180-3	Anti-HA-tag mAb	TANA2	Mouse IgG2bκ	WB, IP, FCM, IC, RIP*, Co-IP*	200 µg/200 µL
M180-3S	Anti-HA-tag mAb	TANA2	Mouse IgG2bκ	WB, IP, FCM, IC	50 µg/50 µL
M180-6	Anti-HA-tag mAb-Biotin	TANA2	Mouse IgG2bκ	ELISA	50 µL
M180-7	Anti-HA-tag mAb-HRP-DirecT HRP-DirecT	TANA2	Mouse IgG2bκ	WB	100 µL
M180-10	Anti-HA-tag mAb-Magnetic Agarose Smart-IP	TANA2	Mouse IgG2bκ	IP	20 tests (Gel: 200 µL)
M180-11	Anti-HA-tag mAb-Magnetic Beads Smart-IP	TANA2	Mouse IgG2bκ	IP	20 tests (Slurry: 1 mL)
M180-A48	Anti-HA-tag mAb-Alexa Fluor® 488 Alexa Fluor®	TANA2	Mouse IgG2bκ	FCM, IC	100 µg/100 µL
M180-A59	Anti-HA-tag mAb-Alexa Fluor® 594 Alexa Fluor®	TANA2	Mouse IgG2bκ	IC	100 µg/100 µL
M180-A64	Anti-HA-tag mAb-Alexa Fluor® 647 Alexa Fluor®	TANA2	Mouse IgG2bκ	FCM, IC	100 µg/100 µL

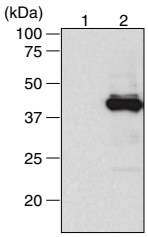
High sensitivity. Can be used in a wide variety of applications regardless of the HA-tagged position.

Applications: WB: 0.1 µg/mL (M180-3, 3S)
1:5,000-1:10,000 (M180-7)
IP: 2 µg/sample (M180-3, 3S)
10 µL/sample (M180-10)
50 µL/sample (M180-11)
FCM: 1 µg/mL (M180-3, 3S, A48)
2-5 µg/mL (M180-A64)
IC: 1 µg/mL (M180-3, 3S, A48, A59)
2-5 µg/mL (M180-A64)
ELISA: 1:2,000 (M180-6)
Specificity: Proteins fused with HA-tag, YPYDVPDYA,
the peptide sequence derived from human influenza hemagglutinin.

■ Western blotting (M180-3)



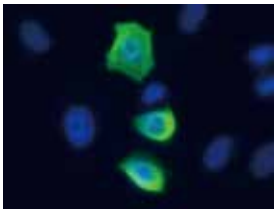
■ Immunoprecipitation (M180-3)



Lane 1:
IP with Isotype control (M077-3)
Lane 2:
IP with Anti-HA-tag mAb (M180-3)

Immunoblotted with 561-7

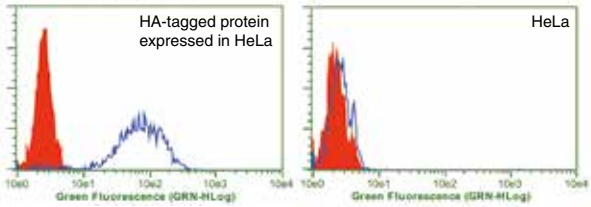
■ Immunocytochemistry (M180-3)



HA-tagged protein expressed in HeLa

Green: Anti-HA-tag mAb (M180-3)
Blue: DAPI

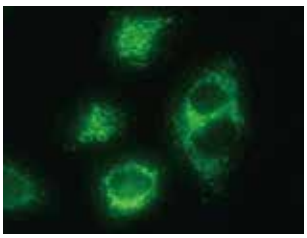
■ Flow cytometry (M180-3)



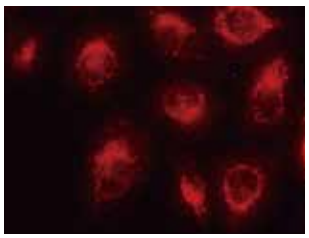
Open: Anti-HA-tag mAb (M180-3)
Closed: Isotype control (M070-3)

■ Anti-HA-tag Alexa Fluor®488, 594, 647 (M180-A48, A59, A64)

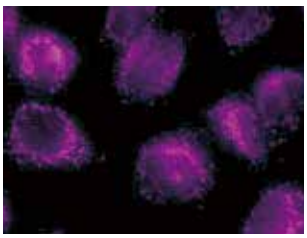
Sample: HA-tagged protein expressed in HeLa



Green: Alexa Fluor®488



Red: Alexa Fluor®594

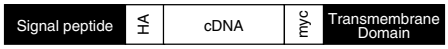


Magenta: Alexa Fluor®647

Code No.	Description	Clone	Isotype	Applications	Size
M132-3	Anti-HA-tag mAb	5D8	Mouse IgG1κ	WB, IP	200 μg/100 μL
M132-10	Anti-HA-tag mAb-Magnetic Agarose Smart-IP	5D8	Mouse IgG1κ	IP	20 tests (Gel: 200 μL)
M132-11	Anti-HA-tag mAb-Magnetic Beads Smart-IP	5D8	Mouse IgG1κ	IP	20 tests (Slurry: 1 mL)

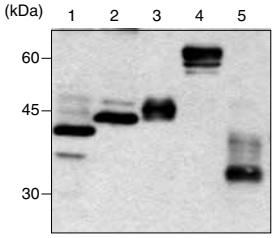
Applications: WB: 1 μg/mL (M132-3)
IP: 1 μg/sample (M132-3)
10 μL/sample (M132-10)
50 μL/sample (M132-11)
Specificity: Proteins fused with HA-tag, YPYDVPDYA, at *N*-terminal and *C*-terminal, including those expressed from pDisplay™ vector.

pDisplay™:



*pDisplay™ is a trade mark of Life Technologies Corporation in the United States.

■ Western blotting (M132-3)



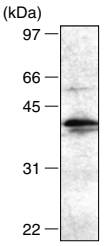
Lane 1: *C*-terminal HA-tagged protein / HEK293T
Lane 2: *N*-terminal HA-tagged protein / HEK293T
Lane 3: HA-tagged protein X/ HEK293T
Lane 4: HA-tagged protein Y/ HEK293T
Lane 5: HA-tagged protein Z/ HEK293T

※Lane 3～5: pDisplay™ was used

Code No.	Description	Clone	Isotype	Applications	Size
561	Anti-HA-tag pAb	Polyclonal	Rabbit IgG	WB, IP, IC	100 μL
561-5	Anti-HA-tag pAb	Polyclonal	Rabbit IgG	WB, IP, IC	500 μL
561-7	Anti-HA-tag pAb-HRP-DirecT HRP-DirecT	Polyclonal	Rabbit IgG	WB	100 μL
561-8	Anti-HA-tag pAb-Agarose Agarose	Polyclonal	Rabbit Ig (aff.)	IP	Gel: 200 μL
561-A48	Anti-HA-tag pAb-Alexa Fluor® 488 Alexa Fluor®	Polyclonal	Rabbit IgG	FCM, IC	100 μL

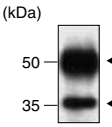
Applications: WB: 1:1,000 (561, 561-5)
1:1,000-1:4,000 (561-7)
IP: 1 μL/sample (561, 561-5)
20 μL/sample (561-8)
FCM: 1:100 (561-A48)
IC: 1:200 (561, 561-5)
1:100 (561-A48)
Specificity: Proteins fused with HA-tag. YPYDVPDYA, the peptide sequence derived from human influenza hemagglutinin.

■ Western blotting (561)



Sample: HA-tagged protein transfectant

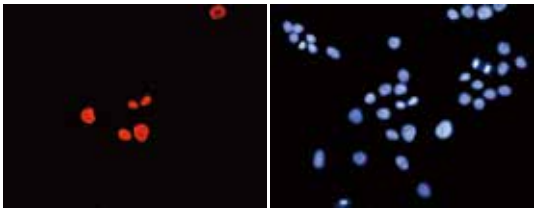
■ Immunoprecipitation (561)



Sample: HA-tagged protein transfectant

Immunoblotted with 561

■ Immunocytochemistry (561)



Anti-HA-tag pAb (561) Hoechst

HA-Max transfected into BHK cells

Data were provided by Dr. Futoshi Shibasaki, Tokyo Metropolitan Institute of Medical Science.

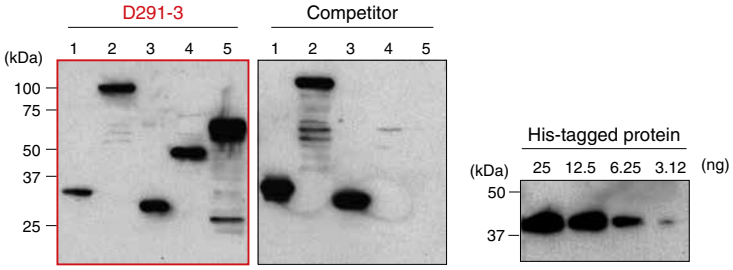
His-tag

Code No.	Description	Clone	Isotype	Applications	Size
D291-3	Anti-His-tag mAb	OGHis	Mouse IgG2aκ	WB, IP, FCM, IC	200 μg/200 μL
D291-3S	Anti-His-tag mAb	OGHis	Mouse IgG2aκ	WB, IP, FCM, IC	50 μg/50 μL
D291-6	Anti-His-tag mAb-Biotin	OGHis	Mouse IgG2aκ	ELISA	50 μg/50 μL
D291-7	Anti-His-tag mAb-HRP-DirecT HRP-DirecT	OGHis	Mouse IgG2aκ	WB	50 μL
D291-8	Anti-His-tag mAb-Agarose Agarose	OGHis	Mouse IgG2aκ	IP	Gel: 200 μL
D291-10	Anti-His-tag mAb-Magnetic Agarose Smart-IP	OGHis	Mouse IgG2aκ	IP	20 tests (Gel: 200 μL)
D291-11	Anti-His-tag mAb-Magnetic Beads Smart-IP	OGHis	Mouse IgG2aκ	IP	20 tests (Slurry: 1 mL)
D291-A48	Anti-His-tag mAb-Alexa Fluor® 488 Alexa Fluor®	OGHis	Mouse IgG2aκ	FCM, IC	50 μg/50 μL
D291-A59	Anti-His-tag mAb-Alexa Fluor® 594 Alexa Fluor®	OGHis	Mouse IgG2aκ	IC	50 μg/50 μL
D291-A64	Anti-His-tag mAb-Alexa Fluor® 647 Alexa Fluor®	OGHis	Mouse IgG2aκ	FCM, IC	50 μg/50 μL

High specificity. Can be used for cell staining regardless of the His-tagged position.

Applications: WB: 0.2 μg/mL (D291-3, 3S)
1:5,000 (D291-7)
IP: 1 μg/sample (D291-3, 3S)
20 μL/sample (D291-8)
10 μL/sample (D291-10)
50 μL/sample (D291-11)
FCM: 0.2 μg/mL (D291-3, 3S)
0.5 μg/mL (D291-A48, A64)
IC: 0.5 μg/mL (D291-3, 3S)
1 μg/mL (D291-A48, A59, A64)
ELISA: 0.25-1 μg/mL (D291-6)
Specificity: *N*-terminal, Internal, and *C*-terminal 6xHis-tagged proteins.

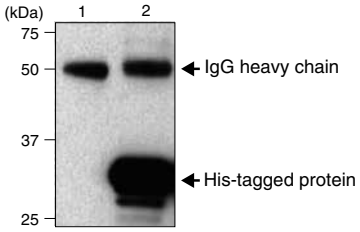
■ Western blotting (D291-3)



Lane 1: *N*-terminal Met-His-tagged protein
Lane 2: Internal His-tagged protein
Lane 3: Internal His-tagged protein
Lane 4: *C*-terminal His-tagged protein
Lane 5: *C*-terminal His-tagged protein

Met: Methionine

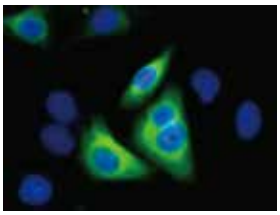
■ Immunoprecipitation (D291-3)



Lane 1: IP with Isotype control (M076-3)
Lane 2: IP with Anti-His-tag mAb (D291-3)

Immunoblotted with D291-3

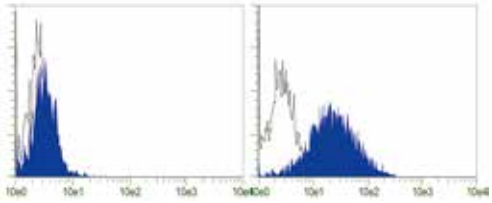
■ Immunocytochemistry (D291-3)



His-tagged protein expressed in HeLa

Green: Anti-His-tag mAb (D291-3)
Blue: DAPI

■ Flow cytometry (D291-3)



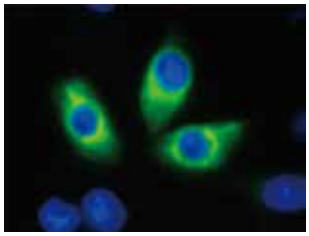
293T

His-tagged protein expressed in 293T

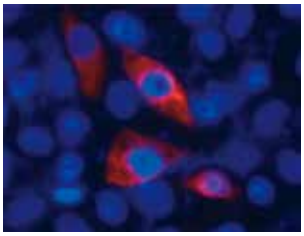
Open: Isotype control
Closed: Anti-His-tag mAb (D291-3)

■ Anti-His-tag Alexa Fluor®488, 594, 647 (D291-A48, A59, A64)

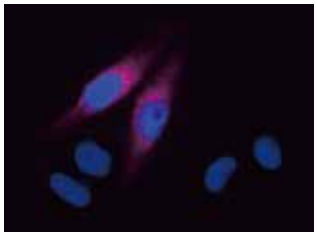
Sample: His-tagged protein expressed in HeLa



Green: Alexa Fluor®488
Blue: DAPI



Red: Alexa Fluor®594
Blue: DAPI



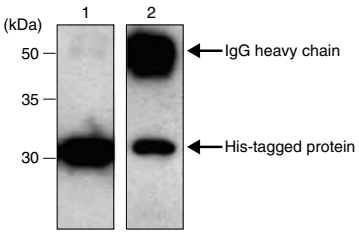
Magenta: Alexa Fluor®647
Blue: DAPI

Code No.	Description	Clone	Isotype	Applications	Size
M136-3	Anti-His-tag mAb	2D8	Mouse IgG2b	IP	100 µg/100 µL

Great performance in IP.

Applications: IP: 0.5-2.0 µg/sample
Specificity: *N*-terminal and *C*-terminal 6xHis-tagged proteins.

■ Immunoprecipitation



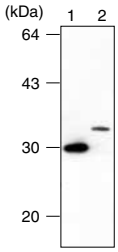
Lane 1: IP with Anti-His-tag mAb (M136-3)
Lane 2: IP with Anti-His-tag pAb (PM032)

Immunoblotted with PM032

Code No.	Description	Clone	Isotype	Applications	Size
M089-3	Anti-His-tag mAb	6C4	Mouse IgG1	WB	100 µg/100 µL

Applications: WB: 1 µg/mL
Specificity: *N*-terminal and *C*-terminal 6xHis-tagged proteins.

■ Western blotting



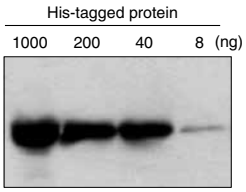
Lane 1: *C*-terminal His-tagged protein
Lane 2: *N*-terminal His-tagged protein

Code No.	Description	Clone	Isotype	Applications	Size
PM032	Anti-His-tag pAb	Polyclonal	Rabbit Ig (aff.)	WB, IP	100 µL
PM032-8	Anti-His-tag pAb-Agarose Agarose	Polyclonal	Rabbit Ig (aff.)	IP	Gel: 200 µL

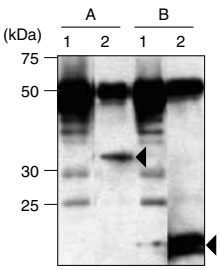
Reacts with *N*-terminal and *C*-terminal.

Applications: WB: 1:1,000 (PM032)
IP: 5 µL/sample (PM032)
20 µL/sample (PM032-8)
Specificity: *N*-terminal and *C*-terminal 6xHis-tagged proteins.

■ Western blotting (PM032)



■ Immunoprecipitation (PM032-8)



Lane 1:
Normal Rabbit IgG–Agarose (PM035-8)
Lane 2:
Anti-His-tag pAb–Agarose (PM032-8)

Sample A: *N*-terminal His-tagged protein
Sample B: *C*-terminal His-tagged protein

Immunoblotted with PM032

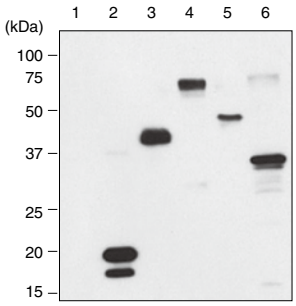
Myc-tag

Code No.	Description	Clone	Isotype	Applications	Size
M192-3	Anti-Myc-tag mAb	My3	Mouse IgG2bκ	WB, IP, FCM, IC	200 µg/200 µL
M192-3S	Anti-Myc-tag mAb	My3	Mouse IgG2bκ	WB, IP, FCM, IC	50 µg/50 µL
M192-6	Anti-Myc-tag mAb-Biotin	My3	Mouse IgG2bκ	WB, ELISA	50 µL
M192-7	Anti-Myc-tag mAb-HRP-DirecT HRP-DirecT	My3	Mouse IgG2bκ	WB	100 µL

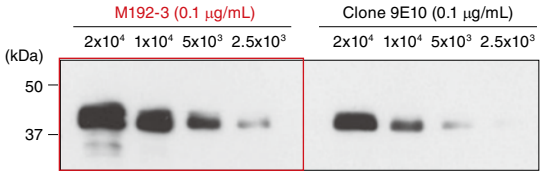
Beats clone 9E10 in sensitivity.

Applications: WB: 0.1 µg/mL (M192-3, 3S)
1:10,000 (M192-6, 7)
IP: 2 µg/sample (M192-3, 3S)
FCM: 0.1 µg/mL (M192-3, 3S)
IC: 0.5 µg/mL (M192-3, 3S)
ELISA: 1:2,000 (M192-6)
Specificity: Proteins fused with Myc-tag, EQKLISEDL.

■ Western blotting (M192-3)

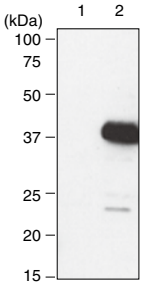


Lane 1: Parental cell (293T)
Lane 2: *N*-terminal Myc-tagged protein A/293T
Lane 3: *C*-terminal Myc-tagged protein B/293T
Lane 4: *C*-terminal Myc-tagged protein C/293T
Lane 5: *C*-terminal Myc-tagged protein D/293T
Lane 6: Internal Myc-tagged protein E/293T



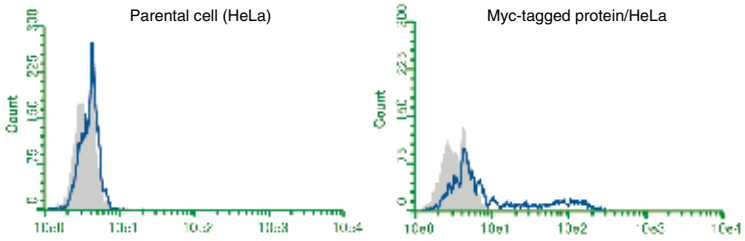
Sample: *C*-terminal Myc-tagged protein A/293T

■ Immunoprecipitation (M192-3)



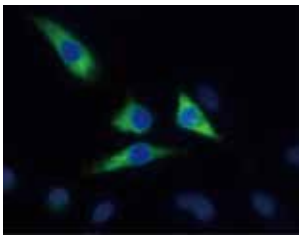
Lane 1: IP with isotype control (M077-3)
Lane 2: IP with Anti-Myc-tag mAb (M192-3)
Immunoblotted with M047-7

■ Flow cytometry (M192-3)



Open: Anti-Myc-tag mAb (M192-3)
Closed: Isotype control (M077-3)

■ Immunocytochemistry (M192-3)



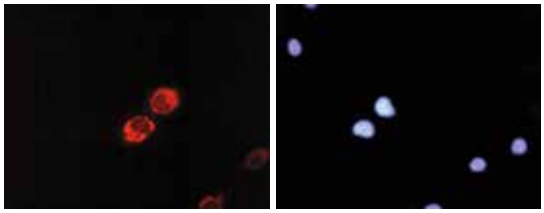
Myc-tagged protein in HeLa

Green: Anti-Myc-tag mAb (M192-3)
Blue: DAPI

Code No.	Description	Clone	Isotype	Applications	Size
562	Anti-Myc-tag pAb	Polyclonal	Rabbit IgG	WB, IP, IC, IH*, ELISA*, ChIP*	100 µL
562-5	Anti-Myc-tag pAb	Polyclonal	Rabbit IgG	WB, IP, IC, IH*, ELISA*, ChIP*	500 µL

Applications: WB: 1:1,000
IP: 2 µL/sample
IC: 1:250
Specificity: Proteins fused with Myc-tag, EQKLISEDL.

■ Immunocytochemistry (562)



Anti-Myc-tag pAb (562) Hoechst

Myc-tagged Bcl-2 transfected into BHK

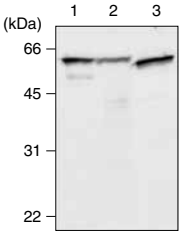
Data were provided by Dr. Futoshi Shibasaki,
Tokyo Metropolitan Institute of Medical Science.

Code No.	Description	Clone	Isotype	Applications	Size
M047-3	Anti-Myc-tag mAb	PL14	Mouse IgG1κ	WB, IP, IC, RIP*	200 µg/100 µL
M047-6	Anti-Myc-tag mAb-Biotin	PL14	Mouse IgG1κ	WB, IC	100 µL
M047-7	Anti-Myc-tag mAb-HRP-DirecT HRP-DirecT	PL14	Mouse IgG1κ	WB	100 µL
M047-8	Anti-Myc-tag mAb-Agarose Agarose	PL14	Mouse IgG1κ	IP	Gel: 200 µL
M047-10	Anti-Myc-tag mAb-Magnetic Agarose Smart-IP	PL14	Mouse IgG1κ	IP	20 tests (Gel: 200 µL)
M047-11	Anti-Myc-tag mAb-Magnetic Beads Smart-IP	PL14	Mouse IgG1κ	IP	20 tests (Slurry: 1 mL)
M047-A48	Anti-Myc-tag mAb-Alexa Fluor® 488 Alexa Fluor®	PL14	Mouse IgG1κ	FCM, IC	100 µg/100 µL
M047-A59	Anti-Myc-tag mAb-Alexa Fluor® 594 Alexa Fluor®	PL14	Mouse IgG1κ	IC	100 µg/100 µL
M047-A64	Anti-Myc-tag mAb-Alexa Fluor® 647 Alexa Fluor®	PL14	Mouse IgG1κ	FCM, IC	100 µg/100 µL

Can be used in wide variety of applications.

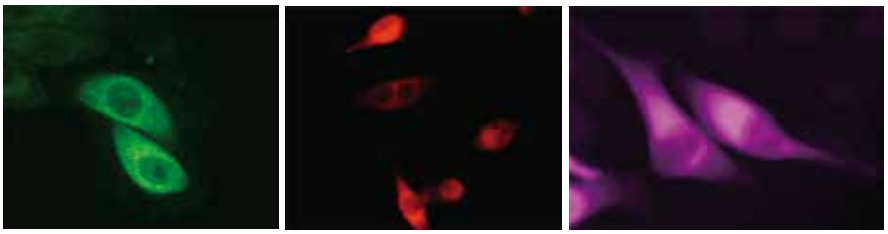
Applications: WB: 1 µg/mL (M047-3)
1:1,000 (M047-6)
1:1,000-1:4,000 (M047-7)
IP: 5 µg/sample (M047-3)
20 µL/sample (M047-8)
10 µL/sample (M047-10)
50 µL/sample (M047-11)
IC: 2 µg/mL (M047-3)
1:100 (M047-6)
5 µg/mL (M047-A48, A59)
10 µg/mL (M047-A64)
FCM: 2-5 µg/mL (M047-A48)
5 µg/mL (M047-A64)
Specificity: Proteins fused with Myc-tag, EQKLISEDL.

■ Western blotting (M047-3)



Lane 1: Myc-tagged p38
Lane 2: Myc-tagged JNK1
Lane 3: Myc-tagged MKK3

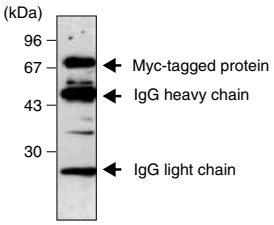
■ Immunocytochemistry (M047-A48, A59, A64)



Anti-Myc-tag mAb–Alexa Fluor®488 (M047-A48)
Anti-Myc-tag mAb–Alexa Fluor®594 (M047-A59)
Anti-Myc-tag mAb-Alexa Flour®647 (M047-A64)

Myc-tagged protein expressed in HeLa

■ Immunoprecipitation (M047-3)



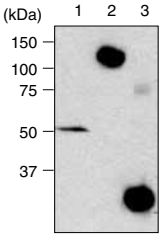
Immunoblotted with M047-3

V5-tag

Code No.	Description	Clone	Isotype	Applications	Size
M167-3	Anti-V5-tag mAb	1H6	Mouse IgG2aκ	WB, IP, IC	100 µg/100 µL
M167-10	Anti-V5-tag mAb-Magnetic Agarose Smart-IP	1H6	Mouse IgG2aκ	IP	20 tests (Gel: 200 µL)
M167-11	Anti-V5-tag mAb-Magnetic Beads Smart-IP	1H6	Mouse IgG2aκ	IP	20 tests (Slurry: 1 mL)

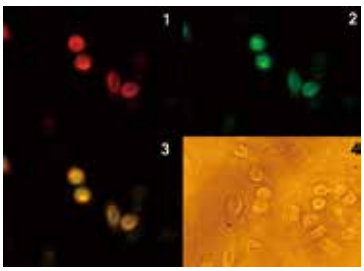
Applications: WB: 1 µg/mL (M167-3)
IP: 5 µg/sample (M167-3)
10 µL/sample (M167-10)
50 µL/sample (M167-11)
IC: 5 µg/mL (M167-3)
Specificity: Proteins fused with V5-tag, GKPIPNPLLGLDST, the peptide sequence derived from simian virus 5, at *N*-terminal and *C*-terminal.

■ Western blotting (M167-3)



Lane1: V5-tagged protein transfectant
Lane2: *C*-terminal V5-tagged protein
Lane3: *N*-terminal V5-tagged protein

■ Immunocytochemistry (M167-3)



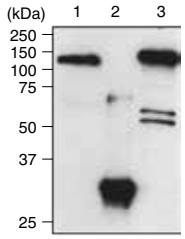
1: Anti-V5-tag pAb (M167-3)
2: GFP own fluorescence
3: Merge, 1 and 2
4: Transmission light

Code No.	Description	Clone	Isotype	Applications	Size
M215-3	Anti-V5-tag mAb	OZA3	Mouse IgG2bκ	WB, IP, FCM, IC	100 μg/100 μL
M215-6	Anti-V5-tag mAb-Biotin	OZA3	Mouse IgG2bκ	WB, ELISA	50 μL
M215-7	Anti-V5-tag mAb-HRP-DirecT HRP-DirecT	OZA3	Mouse IgG2bκ	WB	100 μL
M215-11	Anti-V5-tag mAb-Magnetic Beads Smart-IP	OZA3	Mouse IgG2bκ	IP	20 tests (Slurry: 1 mL)

Higher performance in WB, IP, and IC as compared to clone 1H6. Can be used in FCM as well!

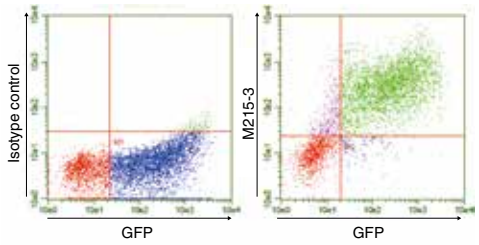
Applications: WB: 1 μg/mL (M215-3)
1:1,000 (M215-10)
IP: 2.5 μg/sample (M215-3)
50 μL/sample (M215-11)
IC: 1 μg/mL (M215-3)
FCM: 0.5 μg/mL (M215-3)
Specificity: Proteins with V5-tag, GKPIPNPLLGLDST, the peptide sequence derived from simian virus 5.

■ Western blotting (M215-3)



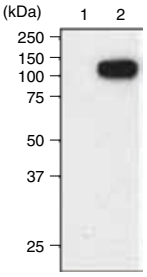
Lane 1: V5-tagged TPO in insect cell culture sup (5 μL/lane)
Lane 2: V5-tagged GFP (25 ng/lane)
Lane 3: V5-tagged β-galactosidase/HEK293T

■ Flow cytometry (M215-3)



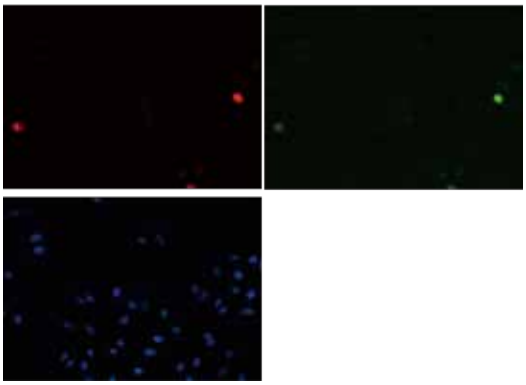
Cells: V5-tag GFP/HEK293T
Left: Isotype control (M077-3)
Right: M215-3

■ Immunoprecipitation (M215-3)



Sample: Insect cell culture sup containing V5-tagged TPO
Lane 1: Isotype control (M077-3)
Lane 2: M215-3
Immunoblotted with Anti-V5-tag pAb-HRP-DirecT (PM003-7)

■ Immunocytochemistry (M215-3)

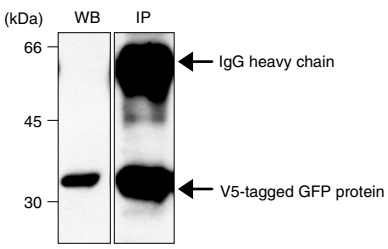


Red: M215-3
Green: V5-tagged GFP own fluorescence
Blue: DAPI
Cells: V5-tagged GFP in HeLa transfectant

Code No.	Description	Clone	Isotype	Applications	Size
PM003	Anti-V5-tag pAb	Polyclonal	Rabbit Ig (aff.)	WB, IP, IF*, ChIP*	100 μL
PM003-7	Anti-V5-tag pAb-HRP-DirecT HRP-DirecT	Polyclonal	Rabbit Ig (aff.)	WB	100 μL
PM003-8	Anti-V5-tag pAb-Agarose Agarose	Polyclonal	Rabbit Ig (aff.)	IP	20 tests (Gel: 200 μL)

Applications: WB: 1:2,000 (PM003)
1:1,000-1:4,000 (PM003-7)
IP: 5 μL/sample (PM003)
20 μL/sample (PM003-8)
Specificity: Proteins fused with V5-tag, GKPIPNPLLGLDST,
the peptide sequence derived from simian virus 5.

■ Western blotting / Immunoprecipitation (PM003)



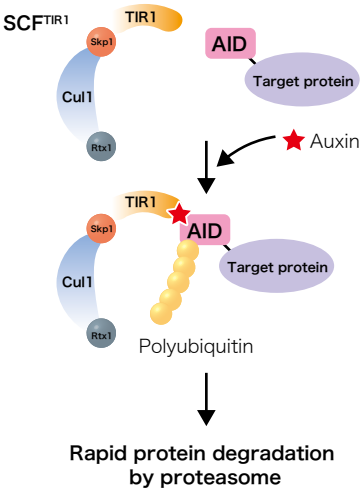
Auxin-induced rapid protein degradation!

◎ **Both mini-AID-tag and full-length AID-tag can be detected.**

Auxin-inducible degron (AID) technology enables to deplete a protein of interest in a half-life less than 30 min by the addition of auxin to culture medium. Auxin includes chemicals such as IAA (indole-3-aceticacid) and NAA (1-naphtalene acetic acid) and includes inhibitors in plants. For the degradation, and SCF ubiquitin ligase complex containing the TIR1 protein is activated via the association of auxin with TIR1. Because the core SCF components are conserved in all eukaryotic cells, it is possible to transplant the degradation pathway to yeast and mammalian cells by expressing TIR1. In those cells expressing TIR1, a protein fused with a degron (AID degron) derived from AUX/IAA can be rapidly degraded in the presence of auxin.

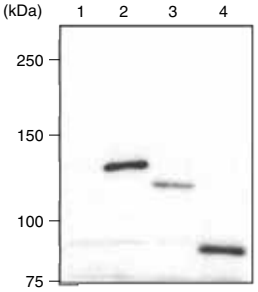
mini-AID-tag (8kDa) was developed based on the full-length AID-tag (25kDa). Our original anti-mini-AID-tag, Clone 1E4, can detect mini-AID-tag and full-length AID-tag as well.

*Expression vector can be obtained by RikenBRC, NBRP-Yeast, or Addgene.
*The original picture is provided by Dr. Masato Kanemaki from NIG. The picture on the right is edited by MBL.



■ Western blotting (M214-3)

Can detect full-length of AID-tag and mini-AID-tag.



Lane 1: *S. cerevisiae*
Lane 2: AID-tagged Mcm4/*S. cerevisiae*
Lane 3: mini-AID-tagged Mcm4/*S. cerevisiae*
Lane 4: 3 x mini-AID-tagged Mcm10/*S. cerevisiae*

The performance has been proven in articles.

Natsume T *et al*. Rapid Protein Depletion in Human Cells by Auxin-Inducible Degron Tagging with Short Homology Donors. Cell Rep. 15, 210-8 (2016) (PMID:27052166)

References

1) Nishimura K *et al.* Nature Methods, 6, 917-222(2009) (PMID:19915560)
2) Nishimura K, Kanemaki MT. Current Protocols in Cell Biology, 64, 20.9.1-16(2014) (PMID:25181302)

Code No.	Description	Clone	Isotype	Applications	Size
M214-3	Anti-mini-AID-tag mAb	1E4	Mouse IgG2aκ	WB, IP, IC	100 μg/100 μL

Fluorescent Protein Antibodies

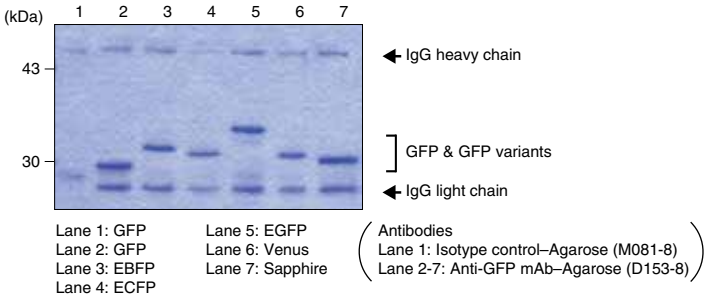
GFP (Green Fluorescent Protein)

Code No.	Description	Clone	Isotype	Applications	Size
D153-3	Anti-GFP (Green Fluorescent Protein) mAb	RQ2	Rat IgG2aκ	IP, IC	100 μg/100 μL
D153-6	Anti-GFP mAb-Biotin	RQ2	Rat IgG2aκ	ELISA	50 μL
D153-8	Anti-GFP (Green Fluorescent Protein) mAb-Agarose Agarose	RQ2	Rat IgG2aκ	IP, ChIP*, Co-IP*, Purification*	Gel: 200 μL
D153-10	Anti-GFP mAb-Magnetic Agarose Smart-IP	RQ2	Rat IgG2aκ	IP	20 tests (Gel: 200 μL)
D153-11	Anti-GFP (Green Fluorescent Protein) mAb-Magnetic Beads Smart-IP	RQ2	Rat IgG2aκ	IP	20 tests (Slurry: 1 mL)
D153-A48	Anti-GFP (Green Fluorescent Protein) mAb-Alexa Fluor® 488 Alexa Fluor®	RQ2	Rat IgG2aκ	IC	50 μg/50 μL
D153-A59	Anti-GFP (Green Fluorescent Protein) mAb-Alexa Fluor® 594 Alexa Fluor®	RQ2	Rat IgG2aκ	IC	50 μg/50 μL
D153-A64	Anti-GFP (Green Fluorescent Protein) mAb-Alexa Fluor® 647 Alexa Fluor®	RQ2	Rat IgG2aκ	IC	50 μg/50 μL

Excellent performance in IP and staining.

Applications: IP: 0.5-2 μg/sample (D153-3)
20 μL/sample (D153-8)
10 μL/sample (D153-10)
50 μL/sample (D153-11)
IC: 2 μg/mL (D153-3)
2-5 μg/mL (D153-A48, A59, A64)
ELISA: 1:5,000/sample (D153-6)
Specificity: Reacts with GFP, EBFP, EGFP, Venus, and Sapphire.

■ Immunoprecipitation (D153-8)

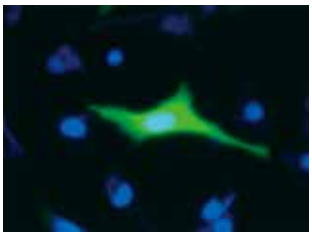


Lane 1: GFP
Lane 2: GFP
Lane 3: EBFP
Lane 4: ECFP
Lane 5: EGFP
Lane 6: Venus
Lane 7: Sapphire

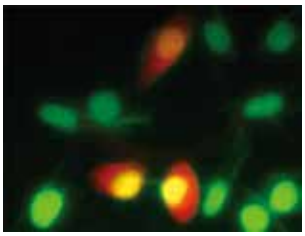
Antibodies
Lane 1: Isotype control–Agarose (M081-8)
Lane 2-7: Anti-GFP mAb–Agarose (D153-8)

■ Anti-GFP Alexa Fluor®488, 594, 647 (D153-A48, A59, A64)

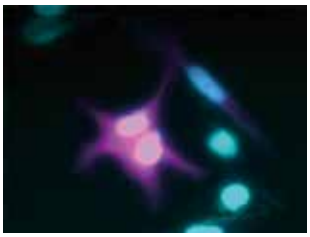
Sample: GFP expressed in HeLa



Green: Alexa Fluor®488,
GFP own fluorescence
Blue: DAPI



Red: Alexa Fluor®594
Green: DAPI



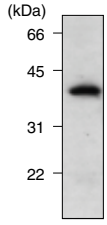
Magenta: Alexa Fluor®647
Cyan: DAPI

Code No.	Description	Clone	Isotype	Applications	Size
M048-3	Anti-GFP mAb	1E4	Mouse IgG2b	WB, IP, IC, IH	100 μg/100 μL

Can be used in a wide variety of applications.

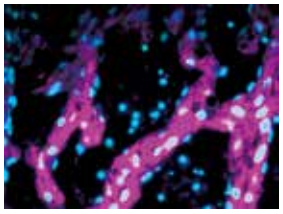
Applications: WB: 1 μg/mL
IP: 5 μg/sample
IC: 2 μg/mL
IH: 10 μg/mL
Specificity: Reacts with GFP, EBFP, SEBFP, ECFP, SECFP, EGFP, SEGFP, cpSEGFP, EYFP, Venus, cpVenus, R-pericam, and Sapphire.

■ Western blotting

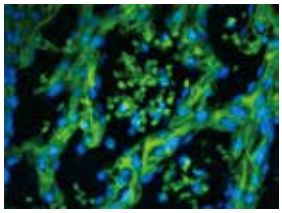


Sample: GFP fusion protein transfectant

■ Immunohistochemistry



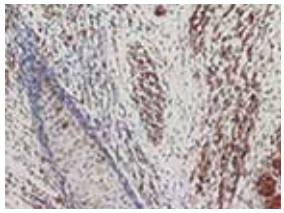
Anti-GFP mAb (M048-3)



GFP own fluorescence

Paraffin embedded section of GFP transgenic mouse.
Magenta: Anti-GFP mAb (M048-3)
Green: GFP own fluorescence
Cyan and Blue: DAPI

■ Immunohistochemistry



Anti-GFP mAb (M048-3)

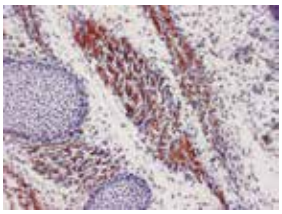
Paraffin embedded section of
GFP transgenic mouse.

Code No.	Description	Clone	Isotype	Applications	Size
598	Anti-GFP pAb	Polyclonal	Rabbit IgG	WB, IP, IC, IH, ChIP*, Immunoelectron microscopy*	100 µL
598-7	Anti-GFP pAb-HRP-DirecT HRP-DirecT	Polyclonal	Rabbit IgG	WB	100 µL

The best Anti-GFP.

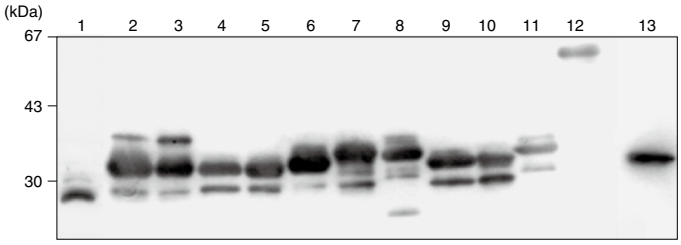
Applications: WB: 1:1,000-1:5,000 (598)
1:1,000-1:4,000 (598-7)
IP: 1 µL/sample (598)
IC: 1:500 (598)
IH: 1:1,000-1:2,000 (598)
Specificity: Reacts with GFP, EBFP, SEBFP, ECFP, SECFP, EGFP, SEGFP, cpSEGFP, EYFP, Venus, cpVenus, R-pericam, and Sapphire.

■ Immunohistochemistry (598)



GFP Mouse paraffin-embedded section stained with Anti-GFP pAb (598)

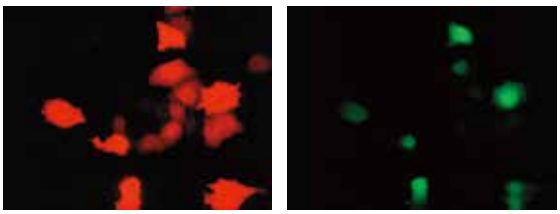
■ Western blotting (598)



Lane 1: GFP
Lane 2: EBFP*
Lane 3: SEBFP*
Lane 4: ECFP*
Lane 5: SECFP*
Lane 6: EGFP*
Lane 7: SEGFP*
Lane 8: cpSEGFP*
Lane 9: EYFP*
Lane 10: Venus*
Lane 11: cpVenus*
Lane 12: R-pericam*
Lane 13: Sapphire*

*: Control proteins were provided by RIKEN.

■ Immunocytochemistry (598)



Anti-GFP pAb (598)

GFP own fluorescence

GFP expressed in BHK

Data were provided by
Dr. Futoshi Shibasaki,
Tokyo Metropolitan Institute of Medical Science.

Reactivity of Anti-GFP and GFP variants

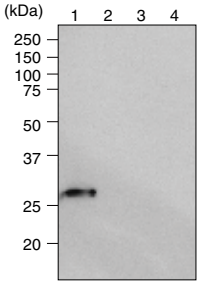
	GFP	EGFP	SEGFP	EBFP	SEBFP	ECFP	SECFP	cpSEGFP	EYFP	Venus	cpVenus	R-pericam	Sapphire
598 (polyclonal)	○	○	○	○	○	○	○	○	○	○	○	○	○
M048-3 (1E4)	○	○	○	○	○	○	○	○	○	○	○	○	○
D153-3 (RQ2)	○	○	N.T.	○	N.T.	○	N.T.	N.T.	N.T.	○	N.T.	N.T.	○

Renilla GFP

Code No.	Description	Clone	Isotype	Applications	Size
PM073	Anti-Renilla GFP pAb	Polyclonal	Rabbit Ig (aff.)	WB, IP, FCM, IC	100 µL

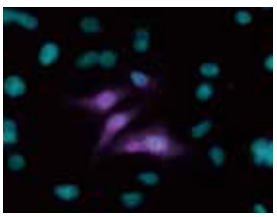
Applications: WB: 1:1,000
P: 1 µL/sample
FCM: 1:2,000
IC: 1:2,000
Specificity: Reacts with *Renilla* GFP, but not with *Aequorea Victoria* GFP or EGFP.

■ Western blotting



Lane 1: *Renilla* GFP/293T
Lane 2: 293T
Lane 3: EGFP/293T
Lane 4: *Aequorea victoria* GFP

■ Immunocytochemistry



Magenta: Anti-Renilla GFP pAb (PM073)
Cyan: DAPI

Renilla GFP in HeLa transfectant

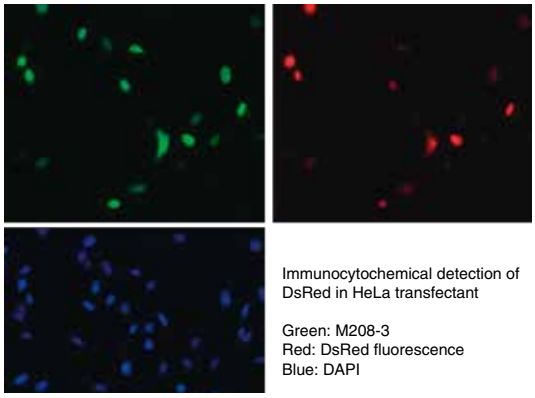
RFP (Red Fluorescent Protein)

Code No.	Description	Clone	Isotype	Applications	Size
M208-3	Anti-RFP mAb Cocktail	1G9, 3G5 (mixed)	Mouse IgG2bκ, IgG1κ	WB, IP, FCM, IC	50 μg/50 μL

◎ A cocktail of the clone 1G9, good for WB, and clone 3G5, for IC, IP, and FCM.

Applications: WB: 1 μg/mL
IP: 5 μg/ sample
IC: 1 μg/mL
FCM: 0.1-1 μg/mL
Specificity: Reacts with DsRed, mRFP1, mCherry, mOrange, and mPlum.

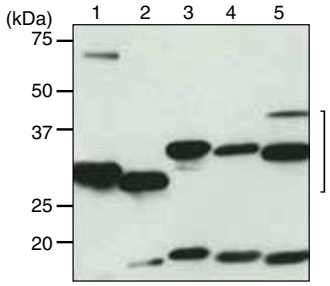
■ Immunocytochemistry (M208-3)



Immunocytochemical detection of DsRed in HeLa transfectant

Green: M208-3
Red: DsRed fluorescence
Blue: DAPI

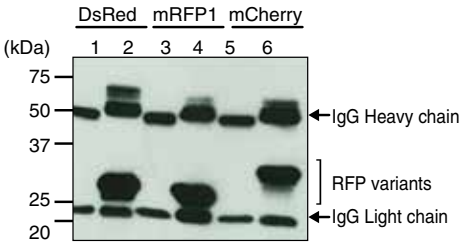
■ Western blotting (M208-3)



Western blot analysis of RFP variants

Lane 1: DsRed
Lane 2: mRFP1*
Lane 3: mCherry*
Lane 4: mOrange*
Lane 5: mPlumn*

*Samples were provided by RIKEN.



Immunoprecipitation of RFP variants

Lane 1, 2: DsRed recombinant protein (5 mg)
Lane 3, 4: mRFP1/HEK293T cell lysate*
Lane 5, 6: mCherry recombinant protein* (5 mg)

Lane 1, 3, 5: Mouse IgG1 (isotype control) (M075-3)

Lane 2, 4, 6: M208-3

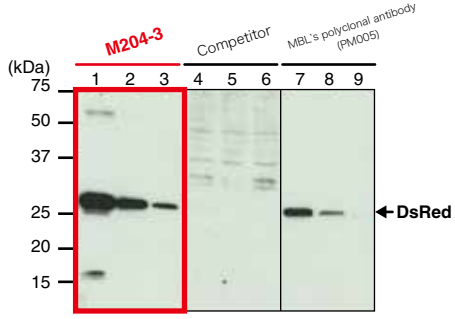
*Samples were provided by RIKEN.

Code No.	Description	Clone	Isotype	Applications	Size
M204-3	Anti-RFP mAb	1G9	Mouse IgG2bκ	WB	100 μg/100 μL
M204-7	Anti-RFP mAb-HRP-DirecT HRP-DirecT	1G9	Mouse IgG2bκ	WB	100 μL

Clone 1G9 is recommended for WB. High sensitivity to detect RFP.

Applications: WB: 1 μg/mL (M204-3)
1:5,000 (M204-7)
Specificity: Reacts with DsRed, mRFP1, mCherry, mOrange, and mPlum.

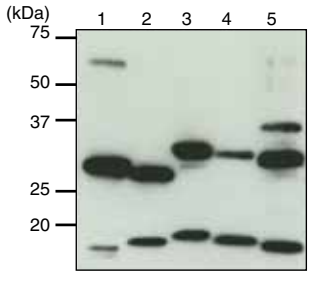
■ Western blotting (M204-3)



Sample
Lane 1, 4, 7: DsRed 10 ng
Lane 2, 5, 8: DsRed 2 ng
Lane 3, 6, 9: DsRed 0.4 ng

WB
First antibody :
Lane 1, 2, 3: M204-3 1 μg/mL
Lane 4, 5, 6: Competitor 1 μg/mL
Lane 7, 8, 9: MBL' s polyclonal antibody (PM005) 1:1,000

■ Western blotting (M204-3)



Lane 1: DsRed
Lane 2: mRFP1*
Lane 3: mCherry*
Lane 4: mOrange*
Lane 5: mPlumn*

*Samples were provided by RIKEN.

Reactivity of Anti-RFP and RFP variants

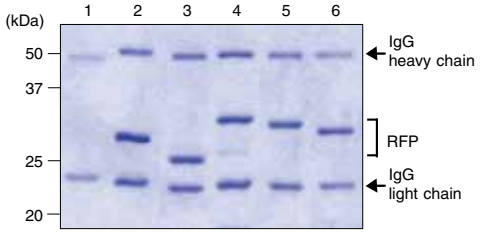
	DsRed(tetramer)	mRFP1	mCherry	mOrange	mPlum	mStrawberry	mBanana	mRaspberry
PM005 (polyclonal)	○	○	○	○	○	○	N.T.	N.T.
M155-3 (8D6)	○	○	○	○	○	N.T.	N.T.	N.T.
M165-3 (3G5)	○	○	○	○	○	N.T.	N.T.	N.T.
M204-3 (1G9)	○	○	○	○	○	N.T.	N.T.	N.T.
M208-3 (1G9, 3G5 (mixed))	○	○	○	○	○	N.T.	N.T.	N.T.

Code No.	Description	Clone	Isotype	Applications	Size
M165-3	Anti-RFP mAb	3G5	Mouse IgG1κ	IP, FCM, IC	100 μg/100 μL
M165-8	Anti-RFP mAb-Agarose Agarose	3G5	Mouse IgG1κ	IP	Gel: 200 μL
M165-11	Anti-RFP mAb-Magnetic Beads Smart-IP	3G5	Mouse IgG1κ	IP	20 tests (Slurry: 1 mL)

Excellent performance in IP, even the single RFP variant.

Applications: IP: 5 μg/sample (M165-3)
20 μL/sample (M165-8)
10 μL/sample (M165-10)
50 μL/sample (M165-11)
IC: 1 μg/mL (M165-3)
FCM: 0.1-1 μg/mL (M165-3)
Specificity: Reacts with DsRed, mRFP1, mCherry, mOrange, and mPlum.

■ Immunoprecipitation (M165-8)



Lane 1: DsRed
Lane 2: DsRed
Lane 3: mRFP1*
Lane 4: mCherry*
Lane 5: mOrange*
Lane 6: mPlum*

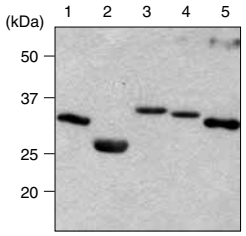
Lane 1: IP with Isotype conrol–Agarose (M075-8)
Lane 2-6: Anti-RFP mAb–Agarose (M165-8)

*: Control proteins were provided by RIKEN.

Code No.	Description	Clone	Isotype	Applications	Size
M155-3	Anti-RFP mAb	8D6	Mouse IgG1κ	WB, IC	100 μg/100 μL

Applications: WB: 1 μg/mL
IC: 10 μg/mL
Specificity: Reacts with DsRed, mRFP1, mCherry, mOrange, and mPlum.

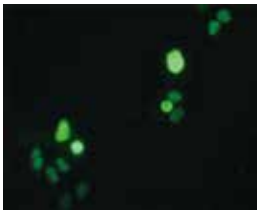
■ Western blotting



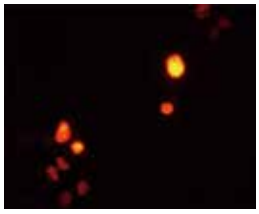
*: Control proteins were provided by RIKEN.

Lane 1: DsRed
Lane 2: mRFP1*
Lane 3: mCherry*
Lane 4: mOrange*
Lane 5: mPlum*

■ Immunocytochemistry



Anti-RFP mAb (M155-3)



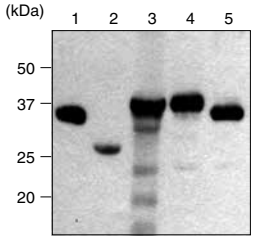
DsRed own fluorescence

DsRed-tagged protein expressed in HeLa

Code No.	Description	Clone	Isotype	Applications	Size
PM005	Anti-RFP pAb	Polyclonal	Rabbit IgG	WB, IC, IH*	100 μL
PM005-7	Anti-RFP pAb-HRP-DirecT HRP-DirecT	Polyclonal	Rabbit IgG	WB	100 μL

Applications: WB: 1:1,000 (PM005)
1:1,000-1:4,000 (PM005-7)
IC: 1:500 (PM005)
Specificity: Reacts with DsRed, mRFP, mCherry, mOrange, mPlum, mStrawberry, and tdTomato.

■ Western blotting (PM005)



*: Control proteins were provided by RIKEN.

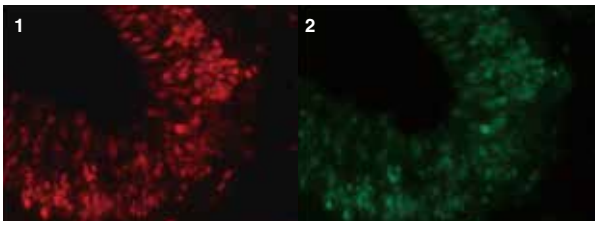
Lane 1: DsRed
Lane 2: mRFP1*
Lane 3: mCherry*
Lane 4: mOrange*
Lane 5: mPlum*

Amalgaam Fluorescent Protein Antibodies

◎ Original Fluorescent Proteins

Code No.	Description	Clone	Isotype	Applications	Size	Cross-reactivity by WB
M102-3M	Anti-monomeric Azami-Green1 mAb	2F11	Mouse IgG1κ	WB	100 μg/100 μL	mAG1
PM052M	Anti-monomeric Azami-Green1 pAb	Polyclonal	Rabbit Ig(aff.)	WB, IP, IC, IH	100 μL	mAG1
PM011M	Anti-Azami-Green pAb	Polyclonal	Rabbit IgG	WB	100 μL	AG, mAG1
M118-3M	Anti-Dronpa-Green mAb	2F6	Mouse IgG2b	IP	100 μg/100 μL	
M106-3M	Anti-Kaede mAb	2F4	Mouse IgG1κ	IP	100 μg/100 μL	
M125-3M	Anti-Kaede mAb	3B1	Mouse IgG1	WB	100 μg/100 μL	Kaede
PM012M	Anti-Kaede pAb	Polyclonal	Rabbit Ig(aff.)	WB	100 μL	Kaede
M126-3M	Anti-monomeric Keima-Red mAb	2F7	Mouse IgG2a	WB	100 μg/100 μL	mKeima-Red
M182-3M	Anti-Keima-Red mAb	1C3	Mouse IgG1κ	WB	100 μg/100 μL	mKeima-Red, dKeima-Red, dKeima570
M128-3M	Anti-Kikume Green-Red mAb	5B3	Mouse IgG2b	WB	100 μg/100 μL	KikGR, mKikGR
M104-3M	Anti-monomeric Kusabira-Orange1 mAb	1H7	Mouse IgG1κ	WB	100 μg/100 μL	mKO1, mKO2, mKG, mKG-O, mKOkappa
M168-3M	Anti-monomeric Kusabira-Orange2 mAb	3B3	Mouse IgG1κ	WB, IP, IC, IH	100 μg/100 μL	mKO2, mKG, mKG-O, mKOkappa
PM051M	Anti-monomeric Kusabira-Orange2 pAb	Polyclonal	Rabbit Ig(aff.)	WB, IP, IC, IH	100 μL	KO1, mKO1, mKO2, mKG, mKG-O, mKOkappa
M116-3M	Anti-Midoriishi-Cyan mAb	2C1	Mouse IgG2b	IP	100 μg/100 μL	
M130-3M	Anti-Midoriishi-Cyan mAb	5B7	Mouse IgG1	WB	100 μg/100 μL	MiCy, mMiCy
M148-3M	Anti-monomeric Kusabira-Green *N*-terminal Fragment mAb	1E6	Mouse IgG2b	WB	100 μg/100 μL	mKO1, mKO2, mKG
M149-3M	Anti-monomeric Kusabira-Green *C*-terminal Fragment mAb	21B10	Mouse IgG2a	WB	100 μg/100 μL	mKO2, mKG

■ Immunohistochemistry (PM052M)

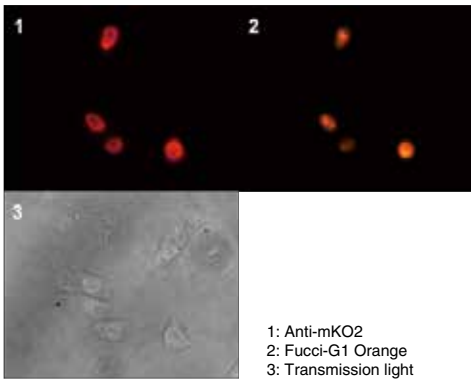


Immunohistochemical detection of mAG1 on frozen section of B6. Cg-Tg (Fucci) 504Bsi mouse embryonic brain (E13) with PM052M (1) and Fucci-S/G_2/M Green own fluorescence (2).

Cg-Tg (Fucci) 596Bsi mouse was provided by RIKEN.

■ Immunocytochemistry (PM051M)

Transfectant



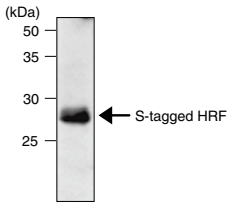
1: Anti-mKO2
2: Fucci-G1 Orange
3: Transmission light

S-tag

Code No.	Description	Clone	Isotype	Applications	Size
PM021	Anti-S-tag pAb	Polyclonal	Rabbit Ig (aff.)	WB, IP	100 µL

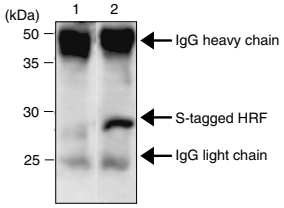
Applications: WB: 1:1,000 (PM021)
IP: 5 µL/sample (PM021)
20 µL/sample (PM021-8)
Specificity: Proteins fused with S-tag, KETAAAKFERQHIDS, the peptide sequence derived from Pancreatic RNase A.

■ Western blotting (PM021)



Sample: S-tagged HRF

■ Immunoprecipitation (PM021)



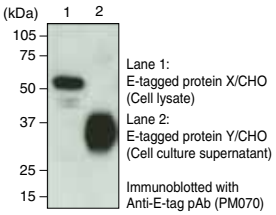
Lane 1: IP with Normal Rabbit IgG (PM035)
Lane 2: IP with Anti-S-tag pAb (PM021)
Sample: S-tagged HRF
Immunoblotted with PM021

E-tag

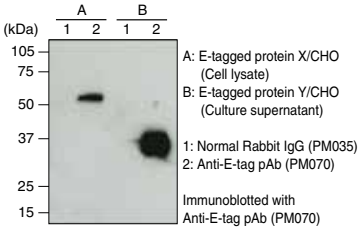
Code No.	Description	Clone	Isotype	Applications	Size
PM070	Anti-E-tag pAb	Polyclonal	Rabbit Ig (aff.)	WB, IP	100 µL

Applications: WB: 1:1,000
IP: 2 µL/sample
Specificity: Proteins fused with E-tag, GAPVPYPDPLEPR.

■ Western blotting



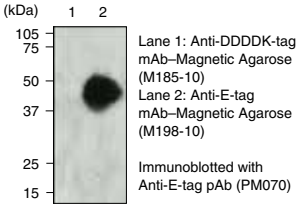
■ Immunoprecipitation



Code No.	Description	Clone	Isotype	Applications	Size
M198-9	Anti-E-tag mAb-Magnetic Beads Smart-IP	21D11	Mouse IgG2aκ	IP	20 tests (Slurry: 1 mL)
M198-10	Anti-E-tag mAb-Magnetic Agarose Smart-IP	21D11	Mouse IgG2aκ	IP	20 tests (Gel: 200 µL)

Applications: IP: 50 µL/sample (M198-9)
10 µL/sample (M198-10)
Specificity: Proteins fused with E-tag, GAPVPYPDPLEPR.

■ Immunoprecipitation (M198-10)

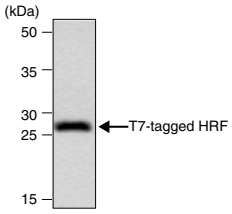


T7-tag

Code No.	Description	Clone	Isotype	Applications	Size
PM022	Anti-T7-tag pAb	Polyclonal	Rabbit Ig (aff.)	WB, IP, ChIP*	100 µL
PM022-8	Anti-T7-tag pAb-Agarose Agarose	Polyclonal	Rabbit Ig (aff.)	IP, Purification, RNA pull-down*	Gel: 200 µL

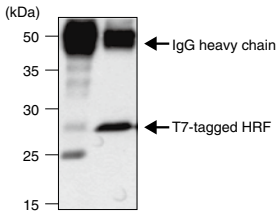
Applications: WB: 1:1,000 (PM022)
IP: 5 µL/sample (PM022)
20 µL/sample (PM022-8)
Specificity: Proteins fused with T7-tag, MASMTGGQQMG, the peptide sequence derived from a capsid protein of T7 bacteriophage.

■ Western blotting (PM022)



Sample: T7-tagged HRF

■ Immunoprecipitation (PM022)



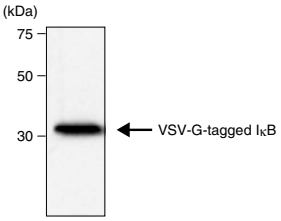
Lane 1: IP with Normal Rabbit IgG (PM035)
Lane 2: IP with Anti-T7-tag pAb (PM022)
Sample: T7-tagged HRF

VSV-G-tag

Code No.	Description	Clone	Isotype	Applications	Size
563	Anti-VSV-G-tag pAb	Polyclonal	Rabbit IgG	WB, IC, IH*	100 µL
563-8	Anti-VSV-G-tag pAb-Agarose Agarose	Polyclonal	Rabbit Ig (aff.)	IP	Gel: 200 µL

Applications: WB: 1:100 (563)
IP: 20 µL/sample (563-8)
IC: 1:100 (563)
Specificity: Reacts with VSV-G-tag, YTDIEMNRLGK.

■ Western blotting (563)

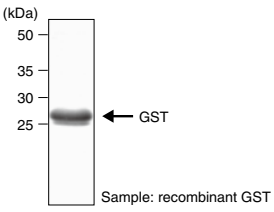


GST (Glutathione-S-transferase)

Code No.	Description	Clone	Isotype	Applications	Size
PM013	Anti-GST-tag pAb	Polyclonal	Rabbit IgG	WB, IP	100 µL
PM013-7	Anti-GST-tag pAb-HRP-DirecT HRP-DirecT	Polyclonal	Rabbit Ig (aff.)	WB	50 µL

Applications: WB: 1:1,000 (PM013)
1:5,000 (PM013-7)
IP: 5 µL/sample (PM013)
Specificity: Proteins fused with GST-tag.

■ Western blotting (PM013)

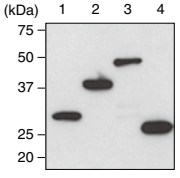


Code No.	Description	Clone	Isotype	Applications	Size
M209-3	Anti-GST-tag mAb	GT5	Mouse IgG1κ	WB, IP	100 µg/ 100 µL

Clone GT5 is recommended for Western blotting.

Applications: WB: 1 µg/mL
IP: 2.5 µg/sample
Specificity: Proteins fused with GST-tag.

■ Western blotting (M209-3)

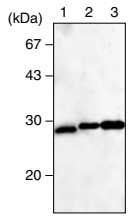


Lane 1: Myc-tagged GST/BL21 DE3 *E.coli* lysate, 50 ng
Lane 2: GST-hLC3 (pGEX-4T-1), 20 ng
Lane 3: GST-tagged protein X (pGEX-6P-1), 20 ng
Lane 4: GST (pGEX-6P-3), 20 ng

Code No.	Description	Clone	Isotype	Applications	Size
M071-3	Anti-GST-tag mAb	3B2	Mouse IgG2bκ	WB	100 µg/ 100 µL

Application: WB: 1 µg/mL
Specificity: Proteins fused with GST-tag.

■ Western blotting



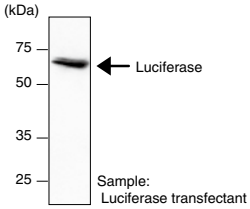
Expression vector
Lane 1: pGEX3X
Lane 2: pGEX4T-1
Lane 3: pGEX5X-1
Sample: recombinant GST

Luciferase

Code No.	Description	Clone	Isotype	Applications	Size
PM016	Anti-Luciferase pAb	Polyclonal	Rabbit IgG	WB, IP, IC, IH	100 µL

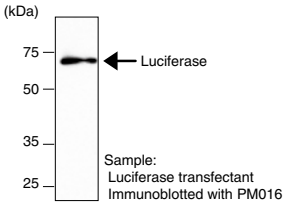
Applications: WB: 1:1,000
IP: 5 µL/sample
IC: 1:200
IH: 1:100
Specificity: Reacts with firefly luciferase but not with *Renilla* luciferase.

■ Western blotting



Sample:
Luciferase transfectant

■ Immunoprecipitation

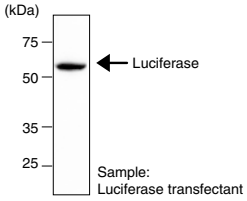


Sample:
Luciferase transfectant
Immunoblotted with PM016

Code No.	Description	Clone	Isotype	Applications	Size
M095-3	Anti-Luciferase mAb	2D4	Mouse IgG1	WB, IP	100 µg/ 100 µL

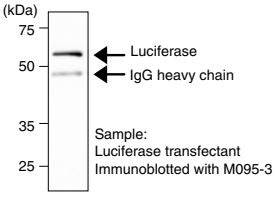
Applications: WB: 1 µg/mL
IP: 5 µg/sample
Specificity: Reacts with firefly luciferase but not with *Renilla* luciferase.

■ Western blotting



Sample:
Luciferase transfectant

■ Immunoprecipitation



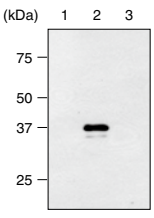
Sample:
Luciferase transfectant
Immunoblotted with M095-3

Renilla Luciferase

Code No.	Description	Clone	Isotype	Applications	Size
PM047	Anti-Renilla Luciferase pAb	Polyclonal	Rabbit Ig (aff.)	WB, IP, IC	100 µL

Applications: WB: 1:1,000
IP: 2 µL/sample
IC: 1:100-1:200
IC (Paraffin embedded sections) : 1:1,000 (Heat treatment is necessary.)
Specificity: Reacts with *Renilla* luciferase but not with firefly luciferase.

■ Western blotting



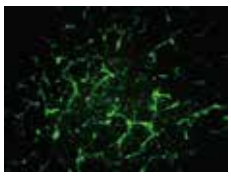
Lane 1:
Firefly luciferase transfectant
Lane 2:
Renilla luciferase transfectant
Lane 3:
parental cell

β-galactosidase

Code No.	Description	Clone	Isotype	Applications	Size
PM049	Anti-β-galactosidase pAb	Polyclonal	Rabbit IgG	WB, IP, IC, IH	100 µL

Applications:
WB: 1:1,000
IP: 1 µL/sample
IC: 1:100
IH: 1:200
Specificity:
β-Galactosidase fusion proteins.

■ Immunohistochemistry (frozen section)



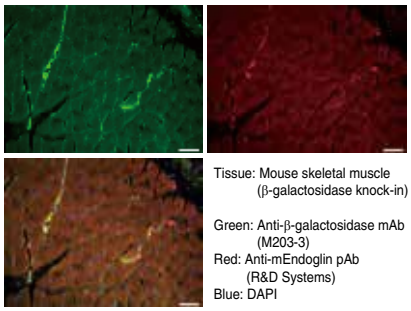
Frozen section of Lewis lung carcinoma xenograft

This data was kindly provided by Dr. Takashi Minami. (Laboratory for Systems Biology and Medicine at RCAST, University of Tokyo)

Code No.	Description	Clone	Isotype	Applications	Size
M203-3	Anti-β-galactosidase mAb	6F4	Rat IgG2aκ	WB, IP, IC, IH	100 µg/ 100 µL

Applications:
WB: 0.1 µg/mL
IP: 2 µg/sample
IC: 2 µg/mL
IH: 5 µg/mL
(frozen section)
Specificity:
β-Galactosidase fusion proteins.

■ Immunohistochemistry (frozen section)



Tissue: Mouse skeletal muscle (β-galactosidase knock-in)

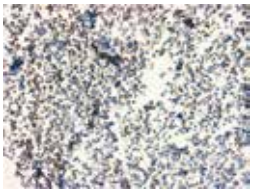
Green: Anti-β-galactosidase mAb (M203-3)
Red: Anti-mEndoglin pAb (R&D Systems)
Blue: DAPI

Data were kindly provided by Ms. Chihiro Makihara and Dr. Takashi Minami. (Division of Vascular Biology, RCAST, The University of Tokyo)

Code No.	Description	Clone	Isotype	Applications	Size
M094-3	Anti-β-galactosidase mAb	5A3	Mouse IgG1	WB, IP, FCM*, IC, IH	100 µg/ 100 µL

Applications: WB: 1 µg/mL
IP: 1 µg/sample
IC: 5 µg/mL
IH: 10 µg/mL
Specificity: β-Galactosidase fusion proteins.

■ Immunocytochemistry



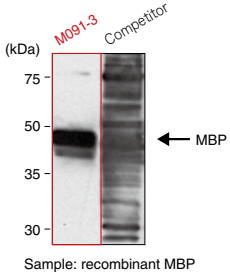
Immunoperoxidase staining of β-galactosidase expressed in 293T

MBP (Maltose Binding Protein)

Code No.	Description	Clone	Isotype	Applications	Size
M091-3	Anti-MBP (Maltose Binding Protein) mAb	1G12	Mouse IgG3	WB, IP	100 µg/ 100 µL

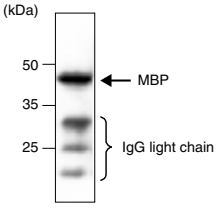
Applications: WB: 1 µg/mL
IP: 2 µg/sample
Specificity: Proteins fused with MBP.

■ Western blotting



Sample: recombinant MBP

■ Immunoprecipitation



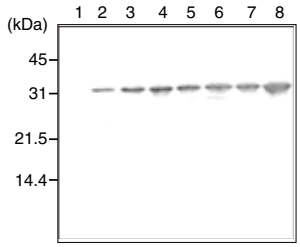
Sample: recombinant MBP
Immunoblotted with M091-3

Trx (Thioredoxin)

Code No.	Description	Clone	Isotype	Applications	Size
M013-3	Anti-Thioredoxin (Trx-tag) mAb	2C9	Mouse IgG1κ	WB	100 µg/ 100 µL

Application: WB: 1 µg/mL
Specificity: Trx and Trx-tag fusion proteins.

■ Western blotting



Lane 1: No induction
Lane 2: Induction 30 minutes
Lane 3: Induction 60 minutes
Lane 4: Induction 90 minutes
Lane 5: Induction 120 minutes
Lane 6: Induction 150 minutes
Lane 7: Induction 180 minutes
Lane 8: Induction 210 minutes

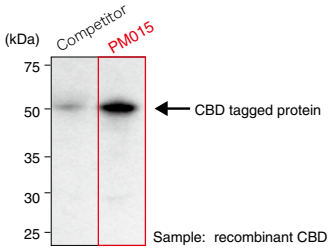
Sample: Thioredoxin fusion protein expressed cell lysate

CBD (Chitin Binding Domain)

Code No.	Description	Clone	Isotype	Applications	Size
PM015	Anti-CBD (Chitin Binding Domain) pAb	Polyclonal	Rabbit IgG	WB	100 µL

Application: WB: 1:1,000
Specificity: Proteins fused with CBD-tag,
TTNPGVSAWQVNTAYTAGQLVIYNGKTYK.

■ Western blotting



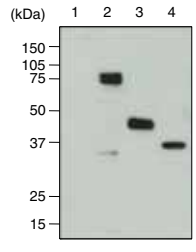
Sample: recombinant CBD

CBP (Calmodulin Binding Protein)

Code No.	Description	Clone	Isotype	Applications	Size
PM071	Anti-Calmodulin Binding Protein-tag pAb	Polyclonal	Rabbit Ig (aff.)	WB, IP	100 µL

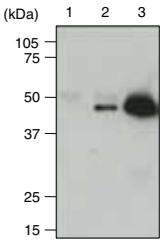
Application: WB: 1:1,000
IP: 2-5 µL/sample
Specificity: Proteins fused with CBD-tag,
TTNPGVSAWQVNTAYTAGQLVIYNGKTYK.

■ Western blotting



Lane 1: Parental cell (293T)
Lane 2: *N*-terminal CBP-tagged protein X/293T
Lane 3: *C*-terminal CBP-tagged protein Y/293T
Lane 4: *C*-terminal CBP-tagged protein Z/293T

■ Immunoprecipitation



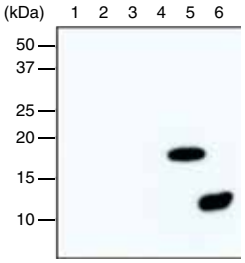
Sample: *C*-terminal CBP-tagged protein Y/293T
Lane 1: Normal rabbit IgG (PM035)
Lane 2: Anti-Calmodulin Binding Protein-tag pAb (PM071, 2 µL/sample)
Lane 3: Anti-Calmodulin Binding Protein-tag pAb (PM071, 5 µL/sample)
Immunoblotted with PM071

Ash-tag

Code No.	Description	Clone	Isotype	Applications	Size
M223-3	Anti-Ash-tag mAb	FLP1C15-2	Mouse IgG1	WB	100 µg/ 100 µL

Application:
WB: 5 µg/mL
※Reacts with the code AM8011M and code AM8012M but not with code SI-8010, SI-8011, SI-8020, and SI-8021.

■ Western blotting



Lane 1: pMonti-Red-MCL
Lane 2: pMonti-Red-MNL
Lane 3: phAG-MCL
Lane 4: phAG-MNL
Lane 5: pAsh-MCL
Lane 6: pAsh-MNL Ver.2

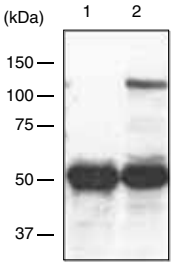
Immunoblotted with M223-3

Glu-Glu-tag

Code No.	Description	Clone	Isotype	Applications	Size
BRP0001	Anti-Glu-Glu-tag pAb	Polyclonal	Rabbit Ig (aff.)	WB, IP	100 µL

Applications:
WB: 1:1,000
IP: 5 µL/sample
Specificity:
Proteins fused with Glu-Glu-tag, EEEEYMPME.

■ Immunoprecipitation



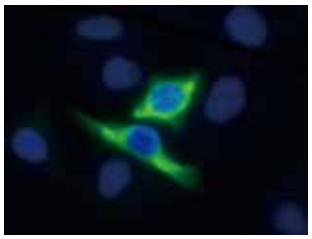
Lane 1:
IP with Normal Rabbit IgG
Lane 2:
IP with BRP0001

Strep-tagII

Code No.	Description	Clone	Isotype	Applications	Size
M211-3	Anti-Strep-tag II mAb	4F1	Mouse IgG2aκ	WB, IP, IC	100 µg/ 100 µL

Applications:
WB: 1 µg/mL
IP: 2 µg/sample
IC: 1 µg/mL
Specificity:
Proteins fused with Strep-tag II, WSHPQFEK.

■ Immunocytochemistry



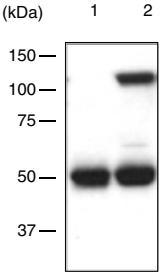
Cells: Strep-tagged Calnexin/HeLa
Green: M211-3
Blue: DAPI

HSV-tag

Code No.	Description	Clone	Isotype	Applications	Size
BRP0002	Anti-HSV-tag pAb	Polyclonal	Rabbit Ig (aff.)	WB, IP	100 µL

Applications:
WB: 1:1,000
IP: 5 µL/sample
Specificity:
Proteins fused with HSV-tag, QPELAPEDPED.

■ Immunoprecipitation



Lane 1:
IP with Normal Rabbit IgG
Lane 2:
IP with BRP0002

Digoxigenin (DIG) , FITC

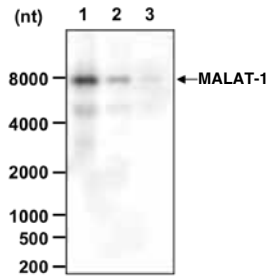
◎ Antibodies for labeled nucleic acid probe detection.

Digoxigenin (DIG) and fluorescein like FITC are haptens that can be easily conjugated or integrated into biomolecules such as oligonucleotides and proteins.

These haptens are detected by specific antibodies in wide variety of applications. MBL's monoclonal antibodies against DIG and FITC are proprietary our original clones with high affinity and specificity. They can be used for non-radioactive immunoassays, Northern/ Southern blot analysis, and *in situ* hybridization to detect DIG or FITC integrated DNA/RNA probes.

Anti-Digoxigenin (DIG) mAb (M227-3)

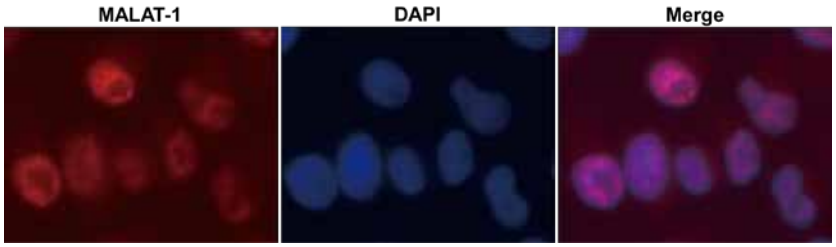
■ Northern blotting



Sample: Total RNA extracted from HEK293T cells
Probe: DIG-labeled MALAT-1 ncRNA (RefSeq ID: NR_002819.3, region 6641-7113)
Antibody: M227-3, 1 μg/mL
Reagent: DIG Wash and Block Buffer Set (Sigma-Aldrich; code no. 11585762001)

Lane 1: 500 ng of total RNA
Lane 2: 100 ng of total RNA
Lane 3: 20 ng of total RNA

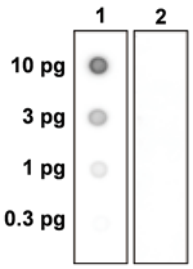
■ RNA Fluorescence *in situ* Hybridization



Cells: HeLa, Probe: MALAT-1 ncRNA (RefSeq ID: NR_002819.3, region 6641-7113)
Antibody: M227-3, 1 μg/mL

Anti-FITC mAb (M228-3)

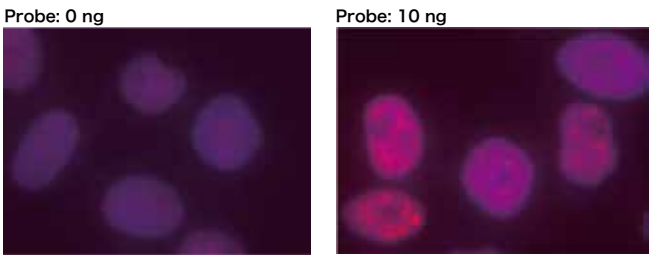
■ Dot blotting



Sample: FITC-labeled RNA synthesized by *in vitro* transcription from *lacZ*-encoding cDNA (RefSeq ID: NC_007779.1, region 363130-364149)

<Immunoblot>
Lane 1: M228-3
Lane 2: Isotype control (M075-3)

■ RNA Fluorescence *in situ* Hybridization



Cells: HeLa,
Probe: FITC-labeled MALAT-1 ncRNA (RefSeq ID: NR_002819.3, region 6641-7113)
Antibody: M228-3, 0.5 μg/mL
Red: MALAT-1, Blue: DAPI

Code No.	Description	Clone	Isotype	Applications	Size
M227-3	Anti-Digoxigenin (DIG) mAb	8-10	Mouse IgG1κ	WB, IP, ELISA, DB, NB, RNA FISH	100 μg/100 μL
M228-3	Anti-FITC mAb	47-11	Mouse IgG1κ	WB, IP, ELISA, DB, NB, RNA FISH	100 μg/100 μL

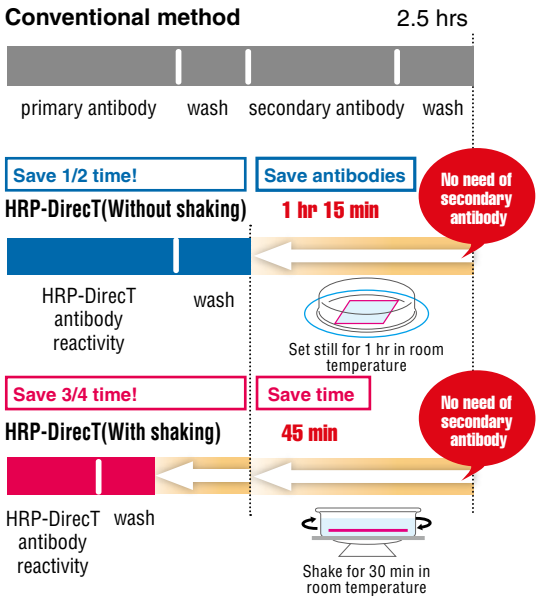
HRP-DirecT

◎ **Save time and get clear data with MBL's HRP-DirecT series.**
◎ **No more secondary antibodies for Western blotting!**

"HRP-DirecT series" is a series of epitope tag antibodies labeled directly with HRP.
MBL has succeeded to develop the HRP labeled antibodies with higher sensitivity and lower background.

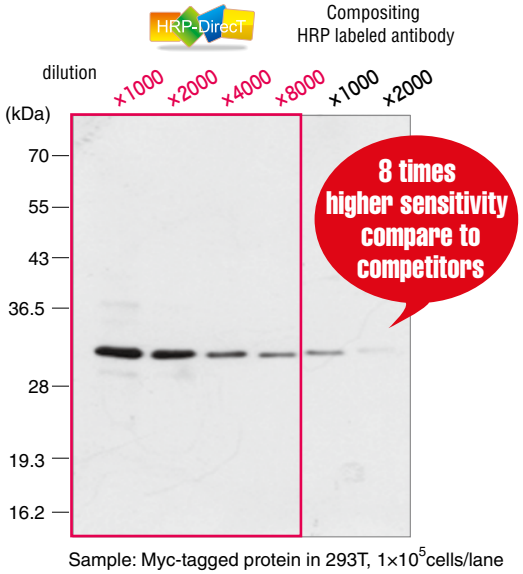
Quick

30 min for Western blotting.



High sensitivity

Can get high sensitivity and save antibody!

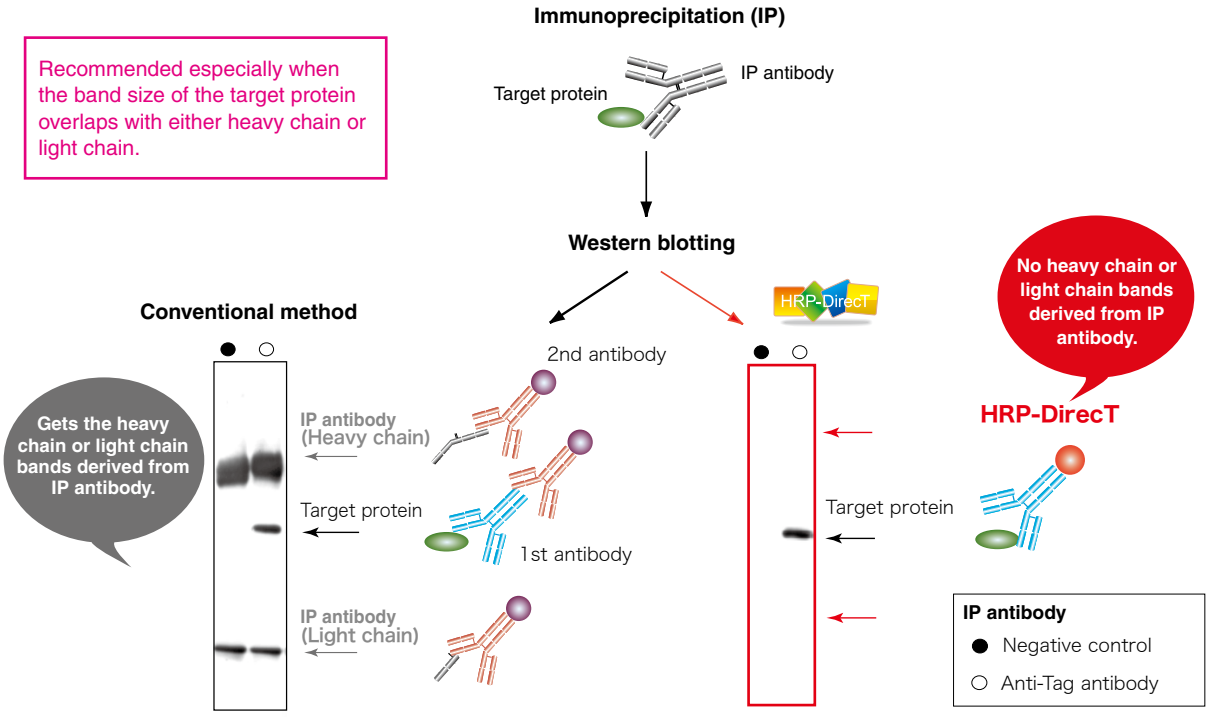


Sample: Myc-tagged protein in 293T, 1×10^{5}cells/lane

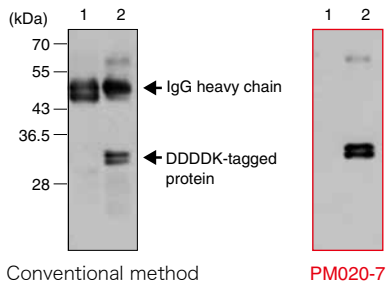
Clear

No cross-reactivity with antibodies used for immunoprecipitation eliminating their heavy and light chain bands in the blots.

Recommended especially when the band size of the target protein overlaps with either heavy chain or light chain.

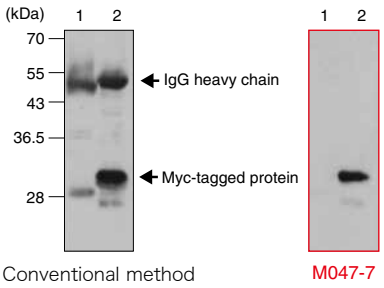


■ Anti-DDDDK-tag pAb–HRP-DirecT (PM020-7)



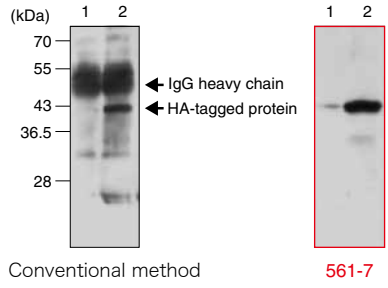
IP Antibodies:
Lane 1: Normal Rabbit IgG–Agarose
Lane 2: Anti-DDDDK-tag–Agarose

■ Anti-Myc-tag mAb–HRP-DirecT (M047-7)



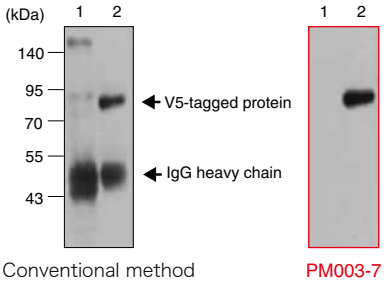
IP Antibodies:
Lane 1: Isotype control–Agarose
Lane 2: Anti-Myc-tag–Agarose

■ Anti-HA-tag pAb–HRP-DirecT (561-7)



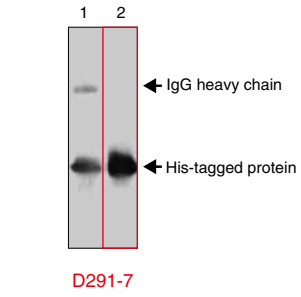
IP Antibodies:
Lane 1: Normal Rabbit IgG–Agarose
Lane 2: Anti-HA-tag–Agarose

■ Anti-V5-tag pAb–HRP-DirecT (PM003-7)



IP Antibodies:
Lane 1: Normal Rabbit IgG–Agarose
Lane 2: Anti-V5-tag–Agarose

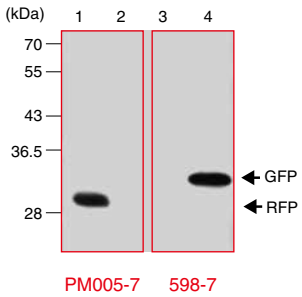
■ Anti-His-tag mAb–HRP-DirecT (D291-7)



IP Antibody: Anti-His-tag–Agarose

Lane 1: Conventional method
Lane 2: Anti-His-tag mAb–HRP-DirecT

■ Anti-GFP pAb–HRP-DirecT (598-7)
Anti-RFP pAb–HRP-DirecT (PM005-7)



Sample:
Lane 1, 3: mRFP in 293T
Lane 2, 4: GFP in 293T

WB:
Lane 1, 2: Anti-RFP pAb–HRP-DirecT
Lane 3, 4: Anti-GFP pAb–HRP-DirecT

HRP-DirecT series

Code No.	Description	Clone	Isotype	Applications	Size
PM020-7	Anti-DDDDK-tag pAb-HRP-DirecT	Polyclonal	Rabbit Ig (aff.)	WB	100 µL
M185-7	Anti-DDDDK-tag mAb-HRP-DirecT	FLA-1	Mouse IgG2aκ	WB	200 µL
561-7	Anti-HA-tag pAb-HRP-DirecT	Polyclonal	Rabbit IgG	WB	100 µL
M180-7	Anti-HA-tag mAb-HRP-DirecT	TANA2	Mouse IgG2bκ	WB	100 µL
D291-7	Anti-His-tag mAb-HRP-DirecT	OGHis	Mouse IgG2aκ	WB	50 µL
M192-7	Anti-Myc-tag mAb-HRP-DirecT	My3	Mouse IgG2bκ	WB	100 µL
M047-7	Anti-Myc-tag mAb-HRP-DirecT	PL14	Mouse IgG1κ	WB	100 µL
PM003-7	Anti-V5-tag pAb-HRP-DirecT	Polyclonal	Rabbit Ig (aff.)	WB	100 µL
M215-7	Anti-V5-tag mAb-HRP-DirecT	OZA3	Mouse IgG2bκ	WB	100 µL
598-7	Anti-GFP pAb-HRP-DirecT	Polyclonal	Rabbit IgG	WB	100 µL
M204-7	Anti-RFP mAb-HRP-DirecT	1G9	Mouse IgG2bκ	WB	100 µL
PM005-7	Anti-RFP pAb-HRP-DirecT	Polyclonal	Rabbit IgG	WB	100 µL
PM013-7	Anti-GST-tag pAb-HRP-DirecT	Polyclonal	Rabbit Ig (aff.)	WB	50 µL
8480	Loading Control Set (β-Actin, α-Tubulin, GAPDH) HRP-DirecT	—	—	—	3 vials 50 µL each

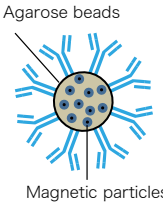
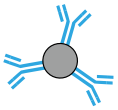
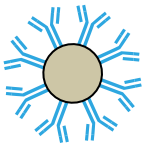
Tag antibody-conjugated magnetic beads or magnetic agarose

◎ ***Smart-IP*** is a series of tag-antibodies conjugated with magnetic beads or magnetic agarose.

Quick Because of using magnetic separation, no need of centrifugal separation.

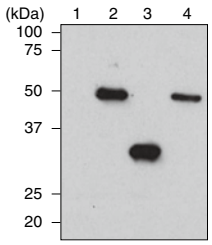
High yield Magnetic beads are tightly collected on the side of tubes so that washing does not affect the yield quantum.

*Sold separately Code No. 3190

Type of beads	Applications	Size of beads	Schematic diagram of beads	Product images	Product features	Recommended to who...
Magnetic Agarose	IP	About 50 μm			-Large amount of IgG/per beads -Less sample loss because of the magnet -Easy to see the gel -Magnetic rack will be needed	★Consider the volume of yield ★Want an easier procedure
Magnetic beads	IP Purification	About 1.5 μm			-Small amount of IgG/per beads -Almost no loss because of the magnet -Easy to disperse and can be used for screening -Easy to see the beads -Magnetic rack will be needed	★Need smaller elution volume ★Want an easier procedure
Agarose	IP Purification	About 100 μm			-Large amount of IgG/per beads -Might lose during the wash -Hard to see the gel -No need of magnetic rack	★Consider the volume of yield ★Want to reduce the cost

Example for the *Smart-IP* by Immunoprecipitation

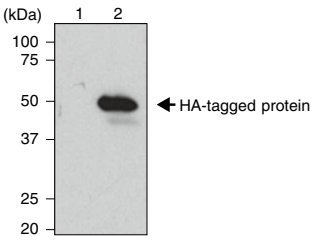
■ Anti-DDDDK-tag mAb (M185-10)



Lane 1: 293T cell lysate
Lane 2: *N*-terminal DDDDK-tagged protein X (1 μg) in 293T lysate
Lane 3: Internal DDDDK-tagged GFP (1 μg) in 293T lysate
Lane 4: *C*-terminal DDDDK-tagged protein X (1 μg) in 293T lysate

Immunoblotted with anti-DDDDK-tag mAb-HRP-DirecT (M185-7)

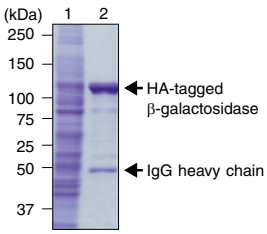
■ Anti-HA-tag mAb (M180-10)



Lane 1: 293T
Lane 2: HA-tagged protein expressed in 293T

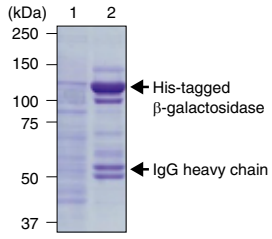
Immunoblotted with M180-7

■ Anti-HA-tag mAb (M132-11)



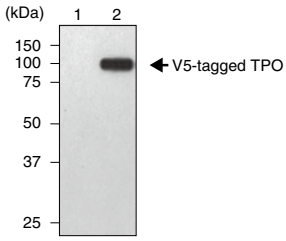
Sample: HA-tagged β-galactosidase/293T
Lane 1: Input (10 μL/lane)
Lane 2: Post-IP beads of Anti-HA-tag mAb (M132-11)

■ Anti-His-tag mAb (D291-11)



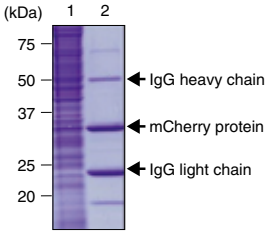
Sample: HA-tagged β-galactosidase/293T
Lane 1: Input (5 μL/lane)
Lane 2: Post-IP beads of Anti-HA-tag mAb (D291-11)

■ Anti-V5-tag mAb (M167-10)



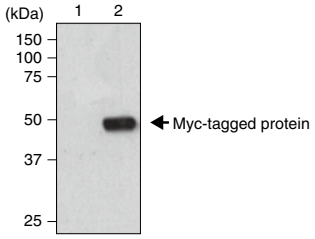
Lane 1: Insect medium
Lane 2: V5-tagged TPO in insect medium
Immunoblotted with PM003-7

■ Anti-RFP mAb (M165-11)



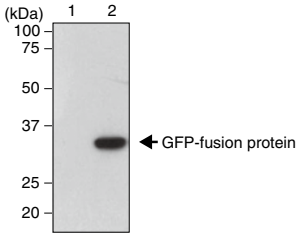
Sample: 293T cell lysate from $3x10^6$ cells
+ mCherry protein* 10 μg
Lane 1: Input (10 μL/lane)
Lane 2: Post-IP beads of Anti-RFP mAb (D291-11)
*Sample was provided by RIKEN.

■ Anti-Myc-tag mAb (M047-10)



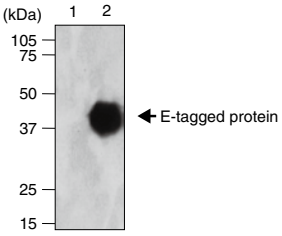
Lane 1: 293T
Lane 2: Myc-tagged protein
expressed in 293T
Immunoblotted with M192-7

■ Anti-GFP mAb (D153-10)



Lane 1: 293T
Lane 2: GFP-fusion protein
expressed in 293T
Immunoblotted with 598-7

■ Anti-E-tag mAb (M198-9)



Lane 1: IP with Mouse IgG2a–Magnetic beads
(M076-11)
Lane 2: IP with Anti-E-tag mAb–Magnetic beads
(M198-9)
Immunoblotted with PM070

Smart-IP Tag antibody-conjugated magnetic beads or magnetic agarose

Code No.	Description	Clone	Isotype	Applications	Size
Magnetic Agarose					
M185-10	Anti-DDDDK-tag mAb-Magnetic Agarose	FLA-1	Mouse IgG2aκ	IP	100 tests (Gel: 1 mL)
M132-10	Anti-HA-tag mAb-Magnetic Agarose	5D8	Mouse IgG1κ	IP	20 tests (Gel: 200 μL)
M180-10	Anti-HA-tag mAb-Magnetic Agarose	TANA2	Mouse IgG2bκ	IP	20 tests (Gel: 200 μL)
D291-10	Anti-His-tag mAb-Magnetic Agarose	OGHis	Mouse IgG2aκ	IP	20 tests (Gel: 200 μL)
M047-10	Anti-Myc-tag mAb-Magnetic Agarose	PL14	Mouse IgG1κ	IP	20 tests (Gel: 200 μL)
M167-10	Anti-V5-tag mAb-Magnetic Agarose	1H6	Mouse IgG2aκ	IP	20 tests (Gel: 200 μL)
D153-10	Anti-GFP mAb-Magnetic Agarose	RQ2	Rat IgG2aκ	IP	20 tests (Gel: 200 μL)
M198-10	Anti-E-tag mAb-Magnetic Agarose	21D11	Mouse IgG2aκ	IP	20 tests (Gel: 200 μL)
Magnetic Beads					
M185-11	Anti-DDDDK-tag mAb-Magnetic Beads	FLA-1	Mouse IgG2aκ	IP, Purification	20 tests (Slurry: 1 mL)
M132-11	Anti-HA-tag mAb-Magnetic Beads	5D8	Mouse IgG1κ	IP, Purification	20 tests (Slurry: 1 mL)
M180-11	Anti-HA-tag mAb-Magnetic Beads	TANA2	Mouse IgG2bκ	IP, Purification	20 tests (Slurry: 1 mL)
D291-11	Anti-His-tag mAb-Magnetic Beads	OGHis	Mouse IgG2aκ	IP, Purification	20 tests (Slurry: 1 mL)
M047-11	Anti-Myc-tag mAb-Magnetic Beads	PL14	Mouse IgG1κ	IP, Purification	20 tests (Slurry: 1 mL)
M167-11	Anti-V5-tag mAb-Magnetic Beads	1H6	Mouse IgG2aκ	IP, Purification	20 tests (Slurry: 1 mL)
M215-11	Anti-V5-tag mAb-Magnetic Beads	OZA3	Mouse IgG2bκ	IP, Purification	20 tests (Slurry: 1 mL)
D153-11	Anti-GFP (Green Fluorescent Protein) mAb-Magnetic Beads	RQ2	Rat IgG2aκ	IP, Purification	20 tests (Slurry: 1 mL)
M165-11	Anti-RFP mAb-Magnetic Beads	3G5	Mouse IgG1κ	IP, Purification	20 tests (Slurry: 1 mL)
M198-9	Anti-E-tag mAb-Magnetic Beads	21D11	Mouse IgG2aκ	IP	20 tests (Slurry: 1 mL)
M075-11	Mouse IgG1 (isotype control)-Magnetic Beads	2E12	Mouse IgG1κ	IP, Purification	20 tests (Slurry: 1 mL)
M076-11	Mouse IgG2a (isotype control)-Magnetic Beads	6H3	Mouse IgG2aκ	IP, Purification	20 tests (Slurry: 1 mL)
M077-11	Mouse IgG2b (isotype control)-Magnetic Beads	3D12	Mouse IgG2bκ	IP, Purification	20 tests (Slurry: 1 mL)
M081-11	Rat IgG2a (isotype control)-Magnetic Beads	2H3	Rat IgG2aκ	IP, Purification	20 tests (Slurry: 1 mL)
MJS002V2	Protein G-Magnetic Beads	–	–	IP	10 mL (1% Slurry)
Magnetic Rack					
3190	Magnetic Rack				1.5 mL x 8 tubes

PURIFICATION KIT

To purify target epitope-tagged proteins without any loss of protein activity and denature, all procedure during purification should be conducted under a neutral pH condition. Severe conditions such as acidic or alkaline elution can occasionally alter protein structures or biological functions of target proteins.

MBL's tagged Protein PURIFICATION KIT employs competitive polypeptides to elute target tagged proteins under a neutral pH for maintaining target protein function and conformation. Epitope tag specific antibodies in this kit are highly optimized for target recovery with high yield and purity from crude samples like cell lysates or culture supernatant of mammal transfectant cells.

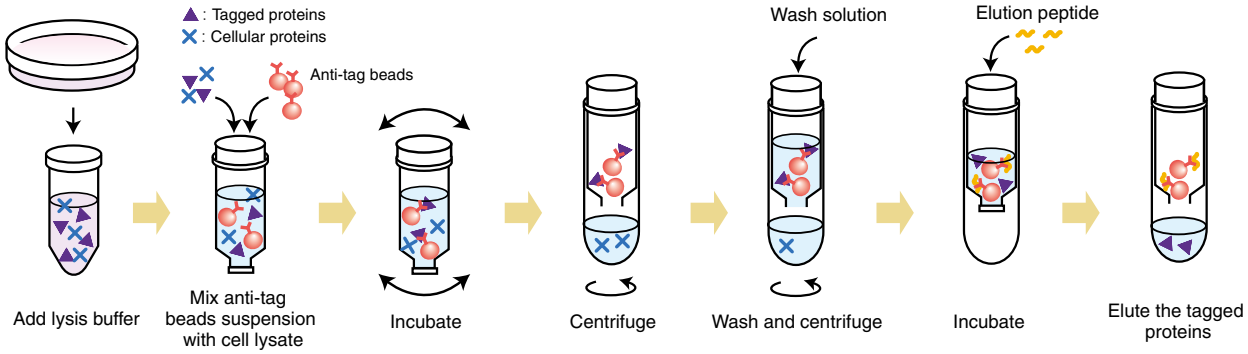
*This product is a set of purification gel, elution peptide, wash buffer, and mini column.

◎ **Recommended to who wants to purify from the small samples.**

◎ **Almost everything is in this kit to start. Easy to get ready.**

◎ **Perfect for pull-down assay.**

■ **Procedure Summary**

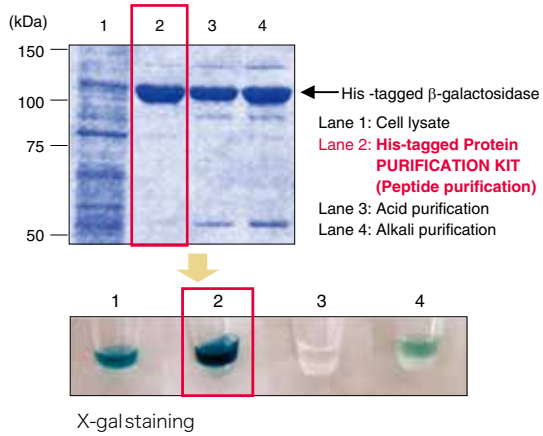


Purified in native conformations

Our purification procedure under a neutral pH condition enables maintaining target protein function and conformation. Useful/available for pull down assay as well to analyze co-immunoprecipitated proteins.

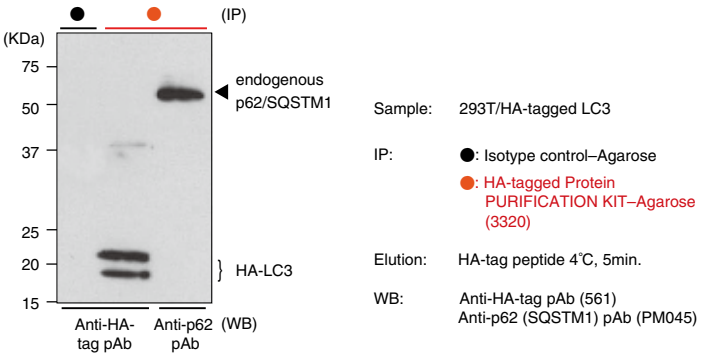
■ **Purification and enzymatic activity of *N*-terminal His-tagged β-galactosidase**

His-tagged Protein PURIFICATION KIT (Code No. 3310)



■ **Pull-down assay**

HA-tagged Protein PURIFICATION KIT (Code No. 3320)



Interaction of p62/SQSTM1 with LC3 was confirmed by pull-down assay using the cell lysate of the HA-LC3 transfectant.

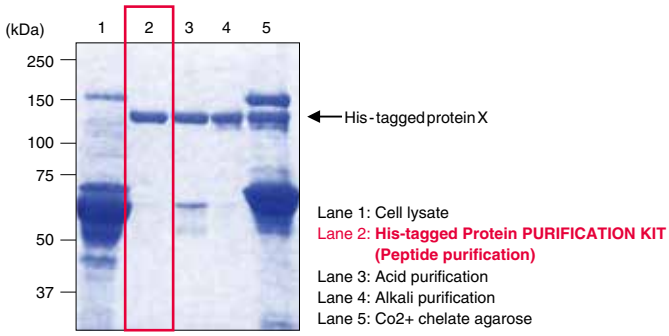
Go to p.30 for product list

High purity

Able to recover high purity target tagged proteins by using our original proprietary antibodies that have superior affinity and specificity to the epitope tag.

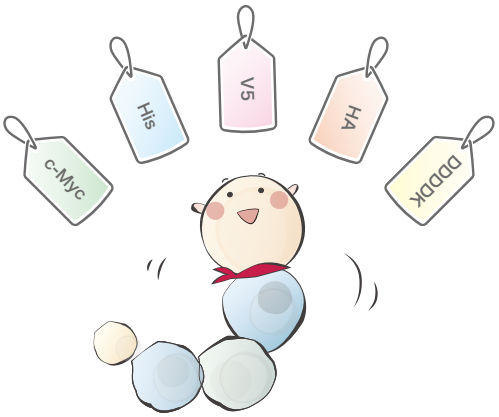
■ **Purification of *C*-terminal His-tagged protein X from culture supernatant**

His-tagged Protein PURIFICATION KIT (Code No. 3310)



Wide variety of products

Wide range of purification kits for each tag-proteins.



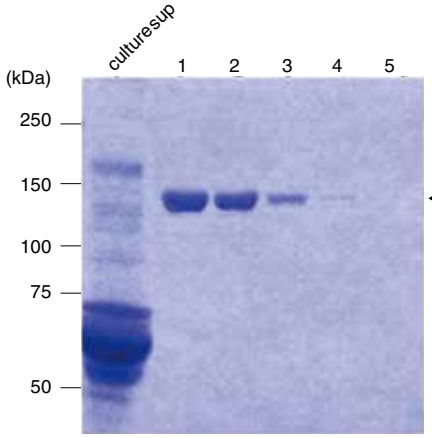
PURIFICATION GEL with Elution Peptide

*This product is a set of purification gel and elution peptide.

◎ **Recommended for the large scale of protein purification.**

■ **Purification of *C*-terminal His-tagged protein X from culture supernatant**

His-tagged Protein PURIFICATION GEL with Elution Peptide (Code No. 3311)



SDS-PAGE (Coomassie Brilliant Blue Staining)
Stable transfectant of CHO (Chinese Hamster Ovary) cells expressing *C*-terminal His-tagged protein were cultured for 7 days in DMEM medium containing 10% Fetal bovine serum. *C*-terminal His-tagged protein was purified from 50 mL of cultured medium according to the preceding protocol. Column bed volume was 0.5 mL. Elution was carried out with 2.5 mL of 1 mg/mL His tag peptide. Each fraction was 0.5 mL.

Go to p.30 for product list

PURIFICATION GEL

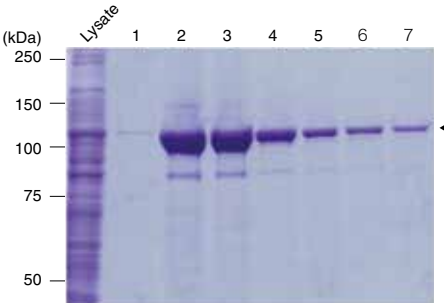
*This product consists of a purification gel only.

◎ **Recommended for the large scale of protein purification.**

◎ **For who wants to prepare elution peptide by themselves.**

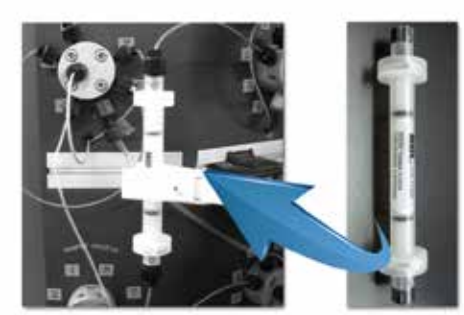
■ **Purification of *N*-terminal DDDDK-tagged β-galactosidase**

DDDDK-tagged Protein PURIFICATION GEL (Code No. 3328R)



SDS-PAGE (Coomassie Brilliant Blue Staining)
Human embryonic kidney cell (293T) were transfected with pcDNA-DDDDK-tagged β-galactosidase and cultured for 60 hours. Cells were then lysed in the Lysis buffer (10 mL/100-mm dish x5) and purified according to the preceding protocol. Column bed volume was 0.25 mL. Elution was carried out with 2 mL of 0.1 mg/mL DDDDK-tag peptide. Each fraction was 0.25 mL.

PURIFICATION CARTRIDGE



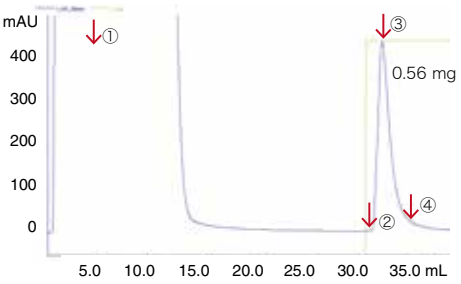
◎ **Ready-to-use-cartridge for the isolation of c-Myc-tagged protein**

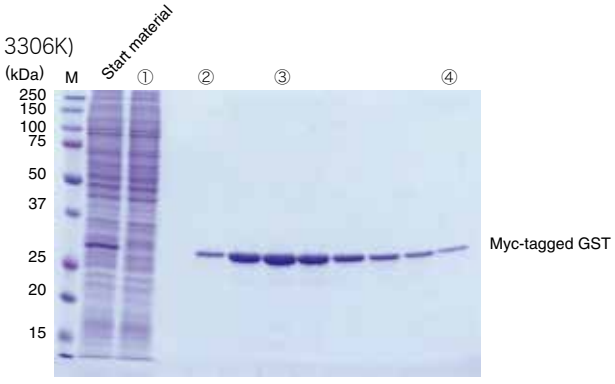
◎ **The cartridge can be used directly on automated ÄKTA or FPLC systems. (Cartridge is 1/16 inch female end)***

* Maximum working pressure: 0.3 MPa
* ÄKTA is a trade mark of GE Healthcare (Life Sciences).

■ **Example of Purification Result**

c-Myc-tagged Protein PURIFICATION CARTRIDGE (Code No. 3306K)





Column bed volume	: 1 mL
Sample	: c-Myc-tagged GST/293T (5 ×10^7 cells)
Cell lysis buffer	: 10 mM Tris-HCl, 150 mM NaCl, 1% NP-40 (pH 7.5)
Wash buffer	: 0.05% Tween/PBS (pH 7.2)
Elution buffer	: 0.5 mg/ml c-Myc peptide in PBS
Flow rate	: 0.75 mL/min
Chromatography system	: ÄKTA explorer 10S (GE Healthcare)

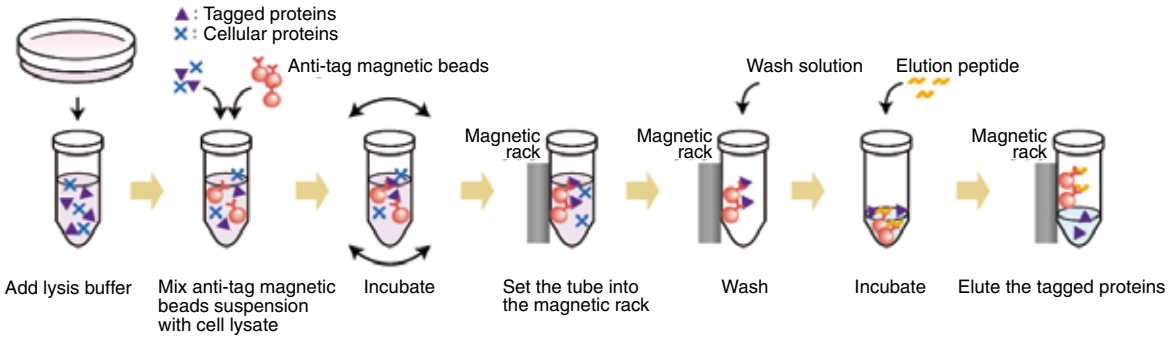
Go to p.30 for product list

Tagged Protein Magnetic Purification Kits

*Sold separately Code No. 3190

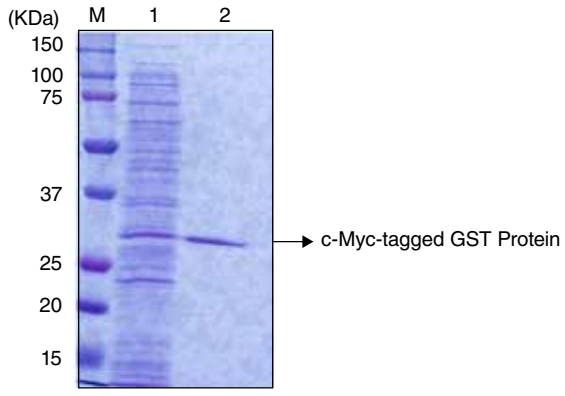
- ◎ **Used magnet for our popular purification kits.**
- ◎ **Magnetic conjugated antibodies, elution peptide, wash solutions are in package.**
- ◎ **Recommended for purifying small amount samples.**
- ◎ **Set of needed reagents.**
- ◎ **No need to centrifuge.**
- ◎ **High yield**
- ◎ **Maintaining target protein function and conformation**

■ Procedure Summary



■ c-Myc-tagged GST protein purification

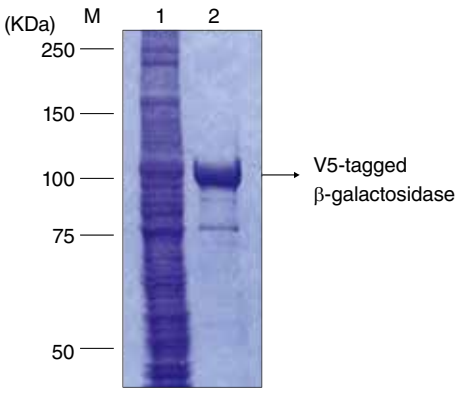
c-Myc-tagged Protein Magnetic Purification Kit (Code No. 3340)



Lane1: Input
Lane2: Eluate
Sample: c-Myc-tagged GST/*E.coli* JM109

■ V5-tagged β-galactosidase purification

V5-tagged Protein Magnetic Purification Kit (Code No. 3341)



Lane 1: Input
Lane 2: Eluate
Sample: V5-tagged β-galactosidase/HEK293T

Go to p.30 for product list

Code No.	Description	Size
3325	DDDDK-tagged Protein PURIFICATION KIT	20 tests
3325A	DDDDK-tagged Protein PURIFICATION KIT (Trial Kit)	2 tests
3326	DDDDK-tagged Protein PURIFICATION GEL with Elution Peptide	gel 1 mL, peptide 5 mg
3327	DDDDK-tagged Protein PURIFICATION GEL with Elution Peptide	gel 5 mL, peptide 25 mg
3328R	DDDDK-tagged Protein PURIFICATION GEL	gel 5 mL
3329R	DDDDK-tagged Protein PURIFICATION GEL	gel 25 mL
3326KR	DDDDK-tagged Protein PURIFICATION CARTRIDGE	1 mL x 1
3325-205	DDDDK-tag peptide (DYKDDDDK)	1 mg x 5
3343	DDDDK-tagged Protein Magnetic Purification Kit	1 kit
3343A	DDDDK-tagged Protein Magnetic Purification Kit (Trial Kit)	1 kit
3320	HA-tagged Protein PURIFICATION KIT	20 tests
3320A	HA-tagged Protein PURIFICATION KIT Trial Kit	2 tests
3321	HA-tagged Protein Purification Gel	1 mL
3320-205	HA-tag peptide (YPYDVPDYA)	2 mg x 5
3342	HA-tagged Protein Magnetic Purification Kit	1 kit
3342A	HA-tagged Protein Magnetic Purification Kit (Trial Kit)	1 kit
3310	His-tagged Protein PURIFICATION KIT	20 tests
3310A	His-tagged Protein PURIFICATION KIT Trial Kit	2 tests
3311	His-tagged Protein PURIFICATION GEL	gel 1 mL x 1, peptide 2 mg x 5
3312	His-tagged Protein PURIFICATION GEL	gel 1 mL x 5, peptide 2 mg x 25
3310-205	His-tag peptide (XXX-(6xHis)-XXX)	2 mg x 5
3305	c-Myc-tagged Protein MILD PURIFICATION KIT Ver.2	20 tests
3305A	c-Myc-tagged Protein MILD PURIFICATION KIT Ver.2 (Trial Kit)	2 tests
3306	c-Myc-tagged Protein MILD PURIFICATION GEL	gel 1 mL, peptide 1 mg
3307	c-Myc-tagged Protein MILD PURIFICATION GEL	gel 1 mL x 5, peptide 1 mg x 5
3306K	c-Myc-tagged Protein PURIFICATION CARTRIDGE	1 mL x 1
3300-205	c-Myc-tag peptide (EQKLISEEDL)	1 mg x 5
3340	c-Myc-tagged Protein Magnetic Purification Kit	1 kit
3340A	c-Myc-tagged Protein Magnetic Purification Kit (Trial Kit)	1 kit
3317	V5-tagged Protein Purification Kit Ver.2	20 tests
3317A	V5-tagged Protein Purification Kit Ver.2 (Trial Kit)	2 tests
3318	V5-tagged Protein Purification Gel Ver.2	1 mL
3315-205	V5-tag peptide (GKPIPNPLLGLDST)	2 mg x 5
3341	V5-tagged Protein Magnetic Purification Kit	1 kit
3341A	V5-tagged Protein Magnetic Purification Kit (Trial Kit)	1 kit
3190	Magnetic Rack	1.5 mL x 8 tubes

FAQs for Purification Kit

1. I cannot purify epitope-tagged target proteins from my samples.

➡If you can successfully confirm that the target protein was expressed rightly by other methods (e.g. western blotting), check whether the epitope-tagged target protein binds to anti-epitope tag antibody conjugated beads (tag beads) or not.

→ Briefly, after incubation the tag beads with the samples, please add SDS-PAGE sample buffer to tag beads, boil it for 5 minutes and perform SDS-PAGE or western blotting.

If you cannot observe the target band as the results, please read the Q2.

If you can obtain the target band as the results, please read the Q3.

2. My epitope-tagged target protein does not bind to the tag beads.

➡There are several possible causes as follows;

-- Your target protein is insoluble or aggregated.

-- Your lysis buffer contains guanidine and/or high concentrated urea. Some reagents can inhibit antigen-antibody reaction.

→ Please refer to “Additional information” in the data sheet for each PURIFICATION KIT. “Additional information” is about the propriety of usage of reagents contained in cell lysis buffer.

-- Sometimes the compatibility between epitope-tags and target proteins affects to protein solubility.

In such cases, try to change the location of epitope tag or use other epitope tags.

3. My epitope-tagged target protein binds to tag beads, but I cannot elute the protein with peptide.

➡Please try to prolong the incubation time or increase elution peptide volume.

If your proteins are easy to be aggregated, please change buffer composition.

e.g. Use lysate buffer for washing step instead of Wash Solution which is included in the PURIFICATION KIT.

When you change composition of buffers, please refer to “Additional information” in the data sheet for each PURIFICATION KIT. “Additional information” is about the propriety of usage of reagents contained in cell lysis buffer.

4. Which lysis buffer should I use?

➡The buffer which contains usual detergent (e.g. NP-40 and Tween 20) and 0.1%-SDS can be used.

5. Does the epitope tag location affect purification efficiency?

➡In many cases, MBL’s PURIFICATION KITs can purify the epitope-tagged target proteins regardless of tag location. However, preliminary study is important in any cases.

6. Can I elute the epitope-tagged target protein at 4˚C ?

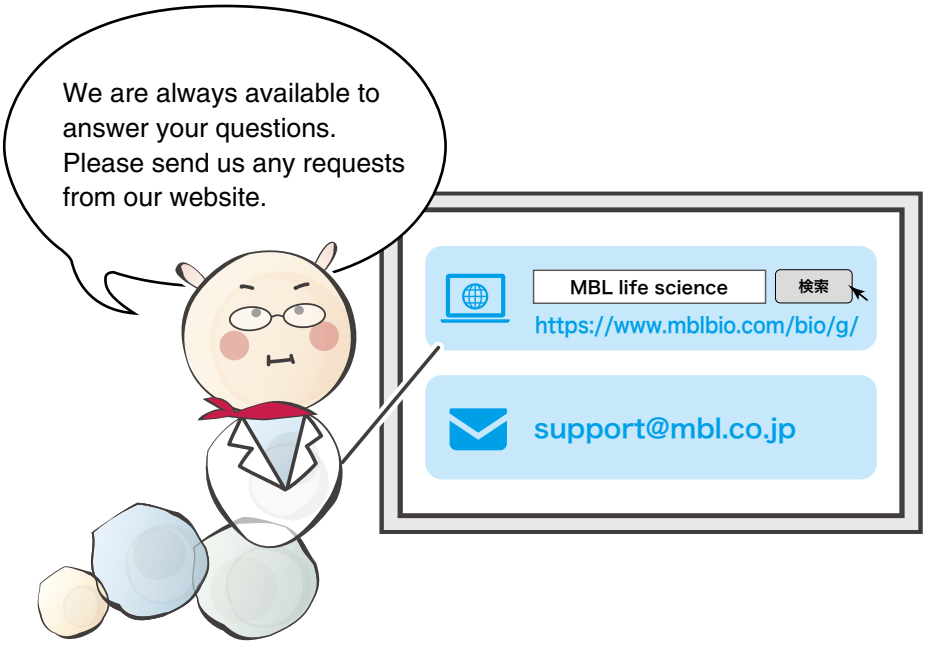
➡Most of MBL’s PURIFICATION KITs accept 4˚C in elution step. However, in His tagged Protein PURIFICATION KIT, the purification efficiency is reduced to almost halve if you elute the epitope-tagged target protein at 4˚C . If you have to perform elution step at 4˚C , please incubate His-tag beads with Elution Peptide Solution at 4˚C overnight before elution.

7. Can I purify the epitope-tagged target protein from inclusion bodies of *E. coli* ?

➡Some buffers which contain guanidine and/or high concentrated urea cannot be used for purification using MBL's PURIFICATION KITs. Aggregated or insoluble proteins cannot be purified, because such proteins cannot bind to tag beads. Therefore, please establish appropriate buffer condition with referring to "Additional information" in the data sheet for each PURIFICATION KIT. "Additional information" is about the propriety of usage of reagents contained in cell lysis buffer.

8. Can I elute the epitope-tagged target protein using buffers other than Elution Peptide Solution?

➡Yes you can. SDS-PAGE sample buffer, acid elution solution, and alkali elution solution can be used. However, the target proteins may lose protein activity and native conformation if you use such elution buffers.
Acid elution solution: 0.1 M Glycine-HCl, pH 3.0 (Neutralize the elution immediately with 1 M Tris-HCl, pH 8.0)
Alkali elution solution: 0.1M NH_3, pH 11.3 (Neutralize the elution immediately with 1 N acetic acid)



Related Antibodies

Isotype Control Antibodies –Negative Control Antibodies

Code No.	Description	Clone	Isotype	Applications	Size
M075-3	Mouse IgG1	2E12	Mouse IgG1κ	IP, FCM	100 µg/100 µL
M075-3M2	Mouse IgG1 (Functional Grade)	2E12	Mouse IgG1κ	–	500 µg
M075-4	Mouse IgG1-FITC	2E12	Mouse IgG1κ	FCM	50 µg/1 mL
M075-5	Mouse IgG1-PE	2E12	Mouse IgG1κ	FCM	1 mL (50 tests)
M075-6	Mouse IgG1-Biotin	2E12	Mouse IgG1κ	FCM	50 µg/50 µL
M075-8	Mouse IgG1-Agarose Agarose	2E12	Mouse IgG1κ	IP	400 µL
M075-11	Mouse IgG1-Magnetic Beads Smart-IP	2E12	Mouse IgG1κ	IP	20 tests (Slurry: 1 mL)
M075-12	Mouse IgG1 (isotype control)-ALP	2E12	Mouse IgG1κ	ELISA	50 µL
M075-A48	Mouse IgG1-Alexa Fluor® 488 Alexa Fluor®	2E12	Mouse IgG1κ	FCM	100 µg
M075-A64	Mouse IgG1-Alexa Fluor® 647 Alexa Fluor®	2E12	Mouse IgG1κ	FCM	100 µg
M076-3	Mouse IgG2a	6H3	Mouse IgG2aκ	IP, FCM	100 µg/100 µL
M076-3M2	Mouse IgG2a (Functional Grade)	6H3	Mouse IgG2aκ	–	500 µg/100 µL
M076-4	Mouse IgG2a-FITC	6H3	Mouse IgG2aκ	FCM	1 mL
M076-5	Mouse IgG2a-PE	6H3	Mouse IgG2aκ	FCM	1 mL (50 tests)
M076-6	Mouse IgG2a-Biotin	6H3	Mouse IgG2aκ	FCM	50 µg/50 µL
M076-11	Mouse IgG2a-Magnetic Beads Smart-IP	6H3	Mouse IgG2aκ	IP	20 tests (Slurry: 1 mL)
M076-12	Mouse IgG2a (isotype control)-ALP	6H3	Mouse IgG2aκ	ELISA	50 µL
M076-A48	Mouse IgG2a-Alexa Fluor® 488 Alexa Fluor®	6H3	Mouse IgG2aκ	FCM	100 µg/100 µL
M076-A64	Mouse IgG2a-Alexa Fluor® 647 Alexa Fluor®	6H3	Mouse IgG2aκ	FCM	100 µL/1 mg/mL
M077-3	Mouse IgG2b	3D12	Mouse IgG2bκ	IP, FCM	100 µg/100 mL
M077-3M2	Mouse IgG2b (Functional Grade)	3D12	Mouse IgG2bκ	–	500 µg/100 µL
M077-4	Mouse IgG2b-FITC	3D12	Mouse IgG2bκ	FCM	50 µg/1 mL
M077-5	Mouse IgG2b-PE	3D12	Mouse IgG2bκ	FCM	1 mL (50 tests)
M077-6	Mouse IgG2b-Biotin	3D12	Mouse IgG2bκ	FCM	50 µg/50 µL
M077-11	Mouse IgG2b-Magnetic Beads Smart-IP	3D12	Mouse IgG2bκ	IP	20 tests (Slurry: 1 mL)
M077-12	Mouse IgG2b (isotype control)-ALP	3D12	Mouse IgG2bκ	ELISA	50 µL
M077-A48	Mouse IgG2b-Alexa Fluor® 488 Alexa Fluor®	3D12	Mouse IgG2bκ	FCM	100 µg/100 µL
M077-A64	Mouse IgG2b-Alexa Fluor® 647 Alexa Fluor®	3D12	Mouse IgG2bκ	FCM	100 µg/100 µL
M078-3	Mouse IgG3	6A3	Mouse IgG3	IP, FCM	100 µg/100 µL
M078-3M2	Mouse IgG3 (Functional Grade)	6A3	Mouse IgG3	–	500 µg/100 µL
M078-4	Mouse IgG3-FITC	6A3	Mouse IgG3	FCM	50 µg
M078-6	Mouse IgG3 -Biotin	6A3	Mouse IgG3	FCM	50 µg/50 µL
M079-3	Mouse IgM	7E10	Mouse IgM	FCM	100 µg/100 µL
M080-3	Rat IgG1	1H5	Rat IgG1	IP, FCM	100 µg/100 µL
M080-3M2	Rat IgG1 (Functional Grade)	1H5	Rat IgG1	–	500 µg/100 µL
M080-4	Rat IgG1-FITC	1H5	Rat IgG1	FCM	50 µg
M080-5	Rat IgG1-PE	1H5	Rat IgG1	FCM	1 mL (50 tests)
M080-A48	Rat IgG1-Alexa Fluor® 488 Alexa Fluor®	1H5	Rat IgG1	FCM	100 µg
M080-A64	Rat IgG1-Alexa Fluor® 647 Alexa Fluor®	1H5	Rat IgG1	FCM	100 µg/100 µL
M081-3	Rat IgG2a	2H3	Rat IgG2aκ	IP, FCM	100 µg/100 µL
M081-3M2	Rat IgG2 (Functional Grade)	2H3	Rat IgG2aκ	–	500 µg/100µL
M081-4	Rat IgG2a-FITC	2H3	Rat IgG2aκ	FCM	50 µg/1 mL
M081-5	Rat IgG2a-PE	2H3	Rat IgG2aκ	FCM	1 mL (50 tests)
M081-8	Rat IgG2a-Agarose Agarose	2H3	Rat IgG2aκ	IP	20 tests (Gel: 200 µL)
M081-11	Rat IgG2a-Magnetic Beads Smart-IP	2H3	Rat IgG2aκ	IP	20 tests (Slurry: 1 mL)
M081-A48	Rat IgG2a-Alexa Fluor® 488 Alexa Fluor®	2H3	Rat IgG2aκ	FCM	100 µg/100 µL
M081-A64	Rat IgG2a-Alexa Fluor® 647 Alexa Fluor®	2H3	Rat IgG2aκ	FCM	100 µg/100 µL
M082-3	Rat IgG2c	6E12	Rat IgG2c	IP, FCM	100 µg/100 µL
M082-3M2	Rat IgG2a (Functional Grade)	6E12	Rat IgG2c	–	500 µg/100 µL
M082-4	Rat IgG2c-FITC	6E12	Rat IgG2c	FCM	50 µg
M090-3	Rat IgG2b	3G8	Rat IgG2bκ	IP, FCM	100 µg
M090-3M2	Rat IgG2b (Functional Grade)	3G8	Rat IgG2bκ	–	500 µg
M090-4	Rat IgG2b-FITC	3G8	Rat IgG2bκ	FCM	1 mL
M090-5	Rat IgG2b-PE	3G8	Rat IgG2bκ	FCM	1 mL (50 tests)
M090-A48	Rat IgG2b-Alexa Fluor® 488 Alexa Fluor®	3G8	Rat IgG2bκ	FCM	100 µg
M090-A64	Rat IgG2b-Alexa Fluor® 647 Alexa Fluor®	3G8	Rat IgG2bκ	FCM	100 µg/100 µL
M189-3	Syrian Hamster IgG	ttko	Hamster IgG	IP, FCM	100 µg/100 µL
M199-3	Armenian Hamster IgG	ttko2	Hamster IgG	IP, FCM	100 µg/100 µL
PM035	Normal Rabbit IgG	Polyclonal	Rabbit IgG	IP, FCM	500 µg/100 µL
PM035-8	Normal Rabbit IgG-Agarose Agarose	Polyclonal	Rabbit IgG	IP	Gel: 200 µL
PM067	Normal Guinea Pig IgG	Polyclonal	Guinea Pig IgG	IP, FCM	100 µg/100 µL
PM084	Normal Chicken IgY	Polyclonal	Chicken IgY	FCM	200 µg/200µL
PM084-4	Normal Chicken IgY-FITC	Polyclonal	Chicken IgY	FCM	100 µg/100 µL
PM084-5	Normal Chicken IgY-PE	Polyclonal	Chicken IgY	FCM	1 mL (50 tests)
PM094	Normal Goat IgG	Polyclonal	Goat IgG	IC	500 µg/100 µL
M194-3	Human IgG1 isotype control chimeric mAb	2E12G1-2	Human IgG1	–	100 µg/100 µL
M195-3	Human IgG2 isotype control chimeric mAb	2E12G2-18	Human IgG2	–	100 µg/100 µL

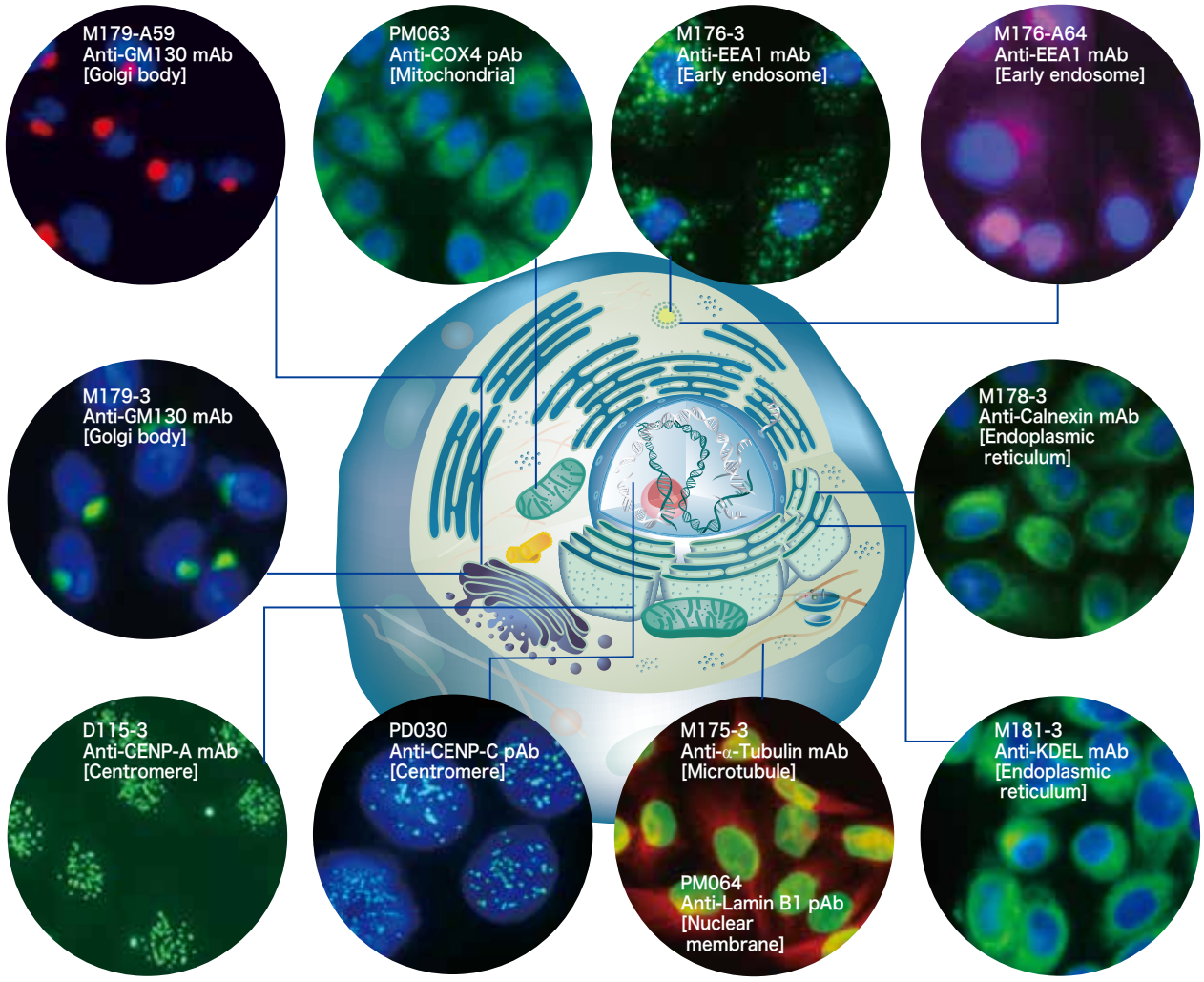
Loading Control Antibodies

Code No.	Description	molecular weight	Clone	Isotype	Applications	Size
M171-3	Anti-GAPDH mAb	around 35 kDa (36 kDa)	3H12	Mouse IgG2aκ	WB	300 µg/100 µL
M171-7	Anti-GAPDH mAb–HRP-DirecT HRP-DirecT	around 35 kDa (36 kDa)	3H12	Mouse IgG2aκ	WB	50 µL
M177-3	Anti-β-Actin mAb	around 40 kDa (42 kDa)	6D1	Mouse IgG1κ	WB, IP	100 µg/100 µL
PM053	Anti-β-Actin pAb	around 40 kDa (42 kDa)	Polyclonal	Rabbit Ig (aff.)	WB, IP	100 µL
PM053-7	Anti-β-Actin pAb–HRP-DirecT HRP-DirecT	around 40 kDa (42 kDa)	Polyclonal	Rabbit Ig (aff.)	WB	50 µL
M175-3	Anti-α-Tubulin mAb	around 50 kDa (50 kDa)	2F9	Mouse IgG2aκ	WB, IP, IC	200 µg/100 µL
PM054	Anti-α-Tubulin pAb	around 50 kDa (50 kDa)	Polyclonal	Rabbit Ig (aff.)	WB, IP, IC	100 µL
PM054-7	Anti-α-Tubulin pAb–HRP-DirecT HRP-DirecT	around 50 kDa (50 kDa)	Polyclonal	Rabbit Ig (aff.)	WB	50 µL
PM064	Anti-Lamin B1 pAb	around 70 kDa (66 kDa)	Polyclonal	Rabbit Ig (aff.)	WB, IP, IC	100 µL
PM088	Anti-Vinculin pAb	around 120 kDa (124 kDa)	Polyclonal	Rabbit Ig (aff.)	WB	100 µL
8480	Loading Control Set (HRP-DirecT) (Contains M171-7, PM054-7, PM053-7) HRP-DirecT				WB	3 vials (50 µL each)

Organelle Marker Antibodies

Code No.	Description	Clone	Isotype	Target	Applications	Size
PM062	Anti-EEA1 pAb	Polyclonal	Rabbit Ig (aff.)	Early endosome	WB, IP, IC	100 µL
M176-3	Anti-EEA1 mAb	3C10	Mouse IgG2aκ	Early endosome	WB, IP, IC	100 µg/100 µL
M176-A48	Anti-EEA1 mAb-Alexa Fluor® 488 Alexa Fluor®	3C10	Mouse IgG2aκ	Early endosome	IC	100 µg/100 µL
M176-A59	Anti-EEA1 mAb-Alexa Fluor® 594 Alexa Fluor®	3C10	Mouse IgG2aκ	Early endosome	IC	100 µg/100 µL
M176-A64	Anti-EEA1 mAb-Alexa Fluor® 647 Alexa Fluor®	3C10	Mouse IgG2aκ	Early endosome	IC	100 µg/100 µL
PM060	Anti-Calnexin pAb	Polyclonal	Rabbit Ig (aff.)	Endoplasmic reticulum	WB, IP, IC	100 µL
M178-3	Anti-Calnexin mAb	4F10	Mouse IgG2aκ	Endoplasmic reticulum	WB, IP, IC	100 µg/100 µL
PM059	Anti-KDEL pAb	Polyclonal	Rabbit Ig (aff.)	Endoplasmic reticulum	WB, IC, IH*	100 µL
M181-3	Anti-KDEL mAb	1D5	Mouse IgG2aκ	Endoplasmic reticulum	WB, IP*, IC, IH*	100 µg/100 µL
PM061	Anti-GM130 pAb	Polyclonal	Rabbit Ig (aff.)	Golgi body	WB, IP, IC	100 µL
M179-3	Anti-GM130 mAb	5G8	Mouse IgG2aκ	Golgi body	WB, IP, IC	100 µg/100 µL
M179-A48	Anti-GM130 mAb-Alexa Fluor® 488 Alexa Fluor®	5G8	Mouse IgG2aκ	Golgi body	IC	100 µg/100 µL
PM063	Anti-COX4 pAb	Polyclonal	Rabbit Ig (aff.)	Mitochondria	WB, IP, IC	100 µL
PM064	Anti-Lamin B1 pAb	Polyclonal	Rabbit Ig (aff.)	Nuclear membrane	WB, IP, IC	100 µL
D115-3	Anti-CENP-A mAb	3-19	Mouse IgG1	Centromere	WB, IC, IH, ChIP*	100 µg/100 µL
PD030	Anti-CENP-C pAb	Polyclonal	Guinea pig IgG	Centromere	WB, IP, IC	100 µL
PM054	Anti-α-Tubulin pAb	Polyclonal	Rabbit Ig (aff.)	Microtubule	WB, IP, IC	100 µL
PM054-7	Anti-α-Tubulin pAb-HRP-DirecT HRP-DirecT	Polyclonal	Rabbit Ig (aff.)	Microtubule	WB	50 µL
M175-3	Anti-α-Tubulin mAb	2F9	Mouse IgG2aκ	Microtubule	WB, IP, IC	200 µg/100 µL
M175-A48	Anti-α-Tubulin mAb-Alexa Fluor® 488 Alexa Fluor®	2F9	Mouse IgG2aκ	Microtubule	IC	100 µg/100 µL
PD033	Anti-β1-Tubulin pAb	Polyclonal	Rabbit Ig (aff.)	Microtubule	WB, IC	100 µL
PM036	Anti-LC3 pAb	Polyclonal	Rabbit IgG	Autophagosome	WB, IP, FCM, IC, IH	100 µL
PD014	Anti-LC3 pAb	Polyclonal	Rabbit IgG	Autophagosome	WB, IC*, IH*	100 µL
M152-3	Anti-LC3 mAb	4E12	Mouse IgG1κ	Autophagosome	WB,IP, FCM, IC, IH*, Immuno-EM	200 µg/100 µL
M186-3	Anti-LC3 mAb	8E10	Mouse IgG2aκ	Autophagosome	WB	100 µg/100 µL
M186-7	Anti-LC3 mAb-HRP-DirecT HRP-DirecT	8E10	Mouse IgG2aκ	Autophagosome	WB	50 µL

Organelle Marker Antibodies



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