

Enhancement of MHC Tetramer Staining - Applications of Anti-PE Antibody -



Let's explore the potential for enhancing MHC tetramer staining with Anti-PE antibody!

For staining examples, please refer to the product datasheet.

PE (Phycoerythrin) is a bright red fluorescent protein found in red algae and cyanobacteria. It is widely used in biomedical research, such as flow cytometry and fluorescence microscopy. PE is known for its brightness and versatility, serving as a fluorescent label by conjugating to antibodies, MHC tetramers or other biomolecules for target detection.

MHC tetramer reagents allow rapid and simple detection of antigen-specific T cells and enable to precisely measure targeted T cell responses in infectious diseases, cancer, and autoimmune diseases.

Enhancement of MHC Tetramer Staining

Unfortunately, MHC tetramer reagents often face difficulties in detecting T cells expressing relatively low-affinity TCRs, such as tumor-specific or autoimmune T cells.

Tungatt *et al.*¹⁾ explored the enhancement of fluorescence intensity in MHC tetramer staining, particularly for T cells expressing low-affinity TCRs, by employing anti-fluorochrome unconjugated primary antibodies, discovering that their simple addition significantly improved staining efficacy with MHC tetramer.

Reference

1) Tungatt, K., *et al.*, *J Immunol.* (2015) [PMID: 25452566]

MBL featured product

- [Anti-PE mAb](#)

Code No.	M240-3
Immunogen	R-Phycoerythrin (PE)
Isotype	Mouse IgG2ak
Clone	C27-6
Applications	MHC Tetramer staining

Example of the application of this product in MHC tetramer staining are provided in the product data sheet.

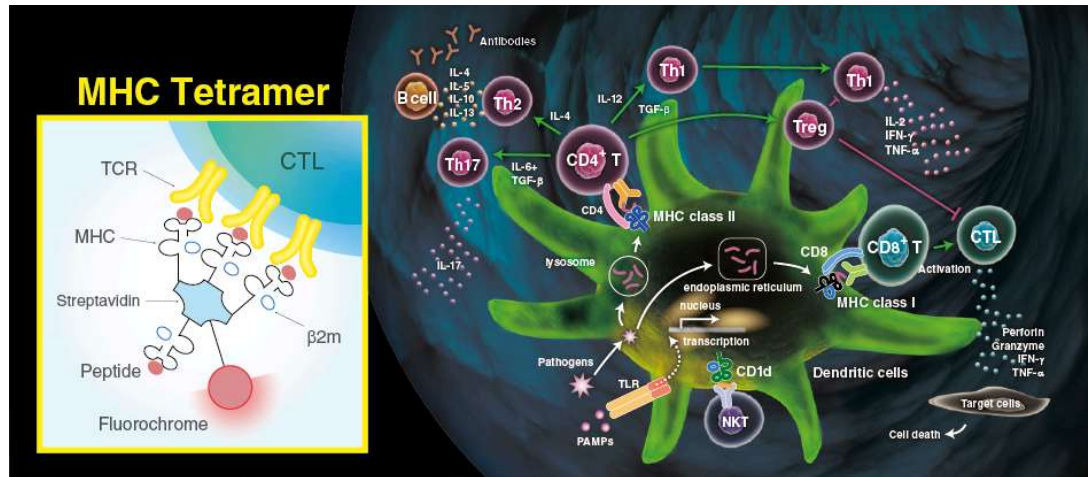
Please refer to it for more information.

The use of this product does not necessarily guarantee enhancement of MHC tetramers staining. Each user should determine the appropriate condition.

Related Product

- [MHC Tetramer](#)

Reagent for direct detection of antigen-specific T cells



Contact us!

Stay tuned for more updates and product information in our upcoming newsletters!
Thank you for choosing MBL for your biological research needs.

For research use only. Not for use in diagnostic or therapeutic procedures. The information is as of September 2025. Please contact us for the latest information. Please read the data sheets carefully before use.

Please see the link below for the policy regarding the handling of personal information.
<https://www.mblbio.com/e/privacy/>

MEDICAL & BIOLOGICAL LABORATORIES CO., LTD.
SUMITOMO FUDOSAN SHIBADAIMON NICHOME BLDG.
2-11-8 Shibadaimon, Minato-ku, Tokyo 105-0012 Japan
E-mail: inquiry-ruo@mbi.co.jp
<https://www.mblbio.com/e/>

*If you have no recollection of this email, please contact us above.

*Reproducing all or any part of the contents is prohibited.

MEDICAL & BIOLOGICAL LABORATORIES CO., LTD.
SUMITOMO FUDOSAN SHIBADAIMON NICHOME BLDG. 2-11-8 Shibadaimon, Minato-ku, Tokyo,
105-0012, Japan

[Unsubscribe](#) [subscription settings](#)