Anti-Human CD74 eFluor® 660 (Alexa® 647 Replacement)

Catalog Number: 50-0747
Also known as: Invariant chain
RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Contents: Anti-Human CD74 eFluor® 660 (Alexa® 647 Replacement)
REF **Catalog Number:** 50-0747
Clone: VIC-Y1
Concentration: 0.2 mg/mL
Host/Isotype: Mouse IgG1

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer
Temperature Limitation: Store at 2-8°C. Do not freeze. Light-sensitive material.
LOT **Batch Code:** Refer to vial
Use By: Refer to vial
Contains sodium azide

Description

This VIC-Y1 monoclonal antibody recognizes human CD74, also known as the MHC Class II-associated invariant chain. A 33-43 kDa nonpolymorphic type II membrane protein, CD74 is highly expressed on B cells and subsets of activated T cells, Langerhans cells, dendritic cells, and epithelial cells. Monocytes and macrophages also express CD74, but at lower levels. CD74 acts as a chaperone of MHC Class II (HLA-DR) proteins, promoting their translocation from the ER to endocytic compartments during antigen presentation. Activation of NFkB and ERK has been shown following CD74 interaction with CD44 and binding to the proinflammatory cytokine macrophage migration-inhibitory factor (MIF). CD74 also plays a role in the maturation of follicular B-cells and accumulation of marginal zone B-cells. CD74 has also been demonstrated to interact with CXCR2 and CXCR4.

The VIC-Y1 monoclonal antibody binds to a cytoplasmic region of human CD74 and thus cannot be used to detect cell surface expression of this molecule.

Applications Reported

This VIC-Y1 antibody has been reported for use in immunohistochemical staining of formalin-fixed paraffin embedded tissue sections.

Applications Tested

This VIC-Y1 antibody has been tested by immunohistochemistry on formalin-fixed paraffin embedded human tonsil tissue using low pH antigen retrieval. This antibody can be used at less than or equal to 20 µg/mL. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Schwartz V, Lue H, Kraemer S, Korbiel J, Krohn R, Ohl K, Bucala R, Weber C, Bernhagen J. A functional heteromeric MIF receptor formed by CD74 and CXCR4. FEBS Lett. 2009 Sep 3;583(17):2749-57.

Becker-Herman S, Arie G, Medvedovsky H, Kerem A, Shachar I. CD74 is a member of the regulated intramembrane proteolysis-processed protein family. Mol Biol Cell. 2005 Nov;16(11):5061-9.

Lamb CA, Yewdell JW, Bennink JR, Cresswell P. Invariant chain targets HLA class II molecules to acidic endosomes containing internalized influenza virus. Proc Natl Acad Sci U S A. 1991 Jul 15;88(14):5998-6002.

Wraight CJ, van Endert P, Möller P, Lipp J, Ling NR, MacLennan IC, Koch N, Moldenhauer G. Human major histocompatibility complex class II invariant chain is expressed on the cell surface. J Biol Chem. 1990 Apr 5;265(10):5787-92. (**VIC-Y1**, IP, Pubmed)

Volc-Platzer B, Majdic O, Knapp W, Wolff K, Hinterberger W, Lechner K, Stingl G. Evidence of HLA-DR antigen biosynthesis by human keratinocytes in disease. J Exp Med. 1984 Jun 1;159(6):1784-9. (**VIC-Y1**, IHC, Pubmed)

Related Products

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00-4955 IHC Antigen Retrieval Solution – Low pH (10X)
50-4714 Mouse IgG1 K Isotype Control eFluor® 660 (P3.6.2.8.1)

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