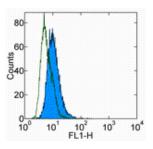


Anti-Human CD283 (TLR3) Functional Grade Purified

Catalog Number: 16-9039

Also Known As:TLR-3, toll-like receptor 3

RUO: For Research Use Only



Staining of permeabilized A549 cells with 1 μg of Mouse IgG1 K Isotype Control Purified (cat. 14-4714) (open histogram) or 1 μg of Anti-Human CD283 (TLR3) Purified (filled histogram) followed by Anti-Mouse IgG FITC (cat. 11-4011). Total cells were used for analysis.

Product Information

Contents: Anti-Human CD283 (TLR3) Functional Grade

Purified

REF Catalog Number: 16-9039

Clone: TLR3.7

Concentration: 1 mg/ml Host/Isotype: Mouse IgG1, κ

Handling Conditions: Use in sterile environment. **Endotoxin Level:** Less than 0.001 ng/ug antibody, as

determined by the LAL assay.

Formulation: aqueous buffer, no sodium azide

Temperature Limitation: Store at 2-8°C.

☐ Batch Code: Refer to Vial
☐ Use By: Refer to Vial

Description

The TLR3.7 monoclonal antibody reacts with human Toll-like receptor 3 (TLR3). To date, at least twelve members of the Toll-like receptor family have been identified. This family of type I transmembrane proteins is characterized by an extracellular domain with leucine-rich repeats and a cytoplasmic domain with homology to the type I IL-1 receptor. In the innate immune response, TLRs recognize molecular patterns associated with microbial pathogens and induce antimicrobial activity. TLR3 recognizes double-stranded (ds)RNA, induces the activation of NF-kB through MyD88-dependent and -independent pathways, and the production of type I interferons (IFNs). TLR3.7 suppressed poly(I):poly(C)-mediated IFN-ß production by human fibroblasts naturally expressing TLR3 on their surface.

Applications Reported

The TLR3.7 antibody has been reported for use in flow cytometric analysis. It has also been reported in *in vitro* inhibition of ligand binding. For optimal detection of TLR3 with this mAb by flow cytometry, PE-conjugated or Biotin-conjugated TLR3.7 (revealed with SAV-PE cat# 12-4312) are recommended.

Applications Tested

This TLR3.7 antibody has been tested by intracellular staining and flow cytometric analysis of A549 and MRC5 cell lines to detect the very low level of this antigen on the surface. This can be used at less than or equal to 2 μ g per test. A test is defined as the amount (μ g) of antibody that will stain a cell sample in a final volume of 100 μ L. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Schreiner B, Voss J, Wischhusen J, Dombrowski Y, Steinle A, Lochmüller H, Dalakas M, Melms A, Wiendl H.. Expression of toll-like receptors by human muscle cells in vitro and in vivo: TLR3 is highly expressed in inflammatory and HIV myopathies, mediates IL-8 release and up-regulation of NKG2D-ligands. FASEB J. 2006 Jan;20(1):118-20. (IHC frozen and WB, PubMed)

Sonali K. Sanghavi and Todd A. Reinhart Increased Expression of TLR3 in Lymph Nodes during Simian Immunodeficiency Virus Infection: Implications for Inflammation and Immunodeficiency. J Immunol. 2005 Oct 15;175(8):5314-23. (TLR3.7, rhesus monkey, IHC (frozen) and intracellular flow cytometry PubMed)

Jorgenson RL, Young SL, Lesmeister MJ, Lyddon TD, Misfeldt ML. Human endometrial epithelial cells cyclically express toll-like receptor 3 (TLR3) and exhibit TLR3-dependent responses to dsRNA. Hum Immunol. 2005 May;66(5):469-82. (IHC paraffin and IHC frozen, PubMed)

Oshiumi H, Matsumoto M, Funami K, Akazawa T, Seya T. 2003. TICAM-1, an adaptor molecule that participates in Toll-like receptor 3-mediated interferon-beta induction. Nat Immunol. 4:161-7

Matsumoto M, Kikkawa S, Kohase M, Miyake K, Seya T. 2002. Establishment of a monoclonal antibody against human Toll-like receptor 3 that blocks double-stranded RNA-mediated signaling. Biochem Biophys Res Commun. 293:1364-9

Alexopoulou L, Holt AC, Medzhitov R, Flavell RA. 2001. Recognition of double-stranded RNA and activation of NF-kappaB by Toll-like receptor 3. Nature. 413:732-8

Related Products

14-8185 B18R Recombinant Protein 16-4714 Mouse IgG1 K Isotype Control Functional Grade Purified

Not for further distribution without written consent. Copyright © 2000-2010 eBioscience, Inc.

Tel: 888.999.1371 or 858.642.2058 • Fax: 858.642.2046 • www.eBioscience.com • info@eBioscience.com