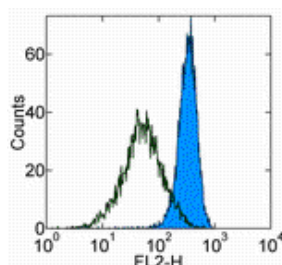


Anti-Mouse CD282 (TLR2) Purified

Catalog Number: 14-9021

Also Known As: toll-like receptor 2

RUO: For Research Use Only



Staining of Raw264.7 cells with 0.5 ug Rat IgG2b K Isotype Control Purified (cat. 14-4031) (open histogram) or 0.5 ug Anti-Mouse CD282 (TLR2) Purified (filled histogram) followed by Anti-Rat IgG Biotin (cat. 13-4813) and Streptavidin PE (cat. 12-4317). Total viable cells were used for analysis.

Product Information

Contents: Anti-Mouse CD282 (TLR2) Purified

REF **Catalog Number:** 14-9021

Clone: 6C2

Concentration: 0.5 mg/mL

Host/Isotype: Rat IgG2b, kappa

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer



Temperature Limitation: Store at 2-8°C.



Batch Code: Refer to Vial



Use By: Refer to Vial



Caution, contains Azide

Description

The 6C2 monoclonal antibody reacts with mouse Toll-like receptor 2 (TLR2). Mouse TLR2 is expressed by the myeloid lineage, including macrophage and dendritic cells in splenocytes and the RAW264.7 cell line. To date, at least twelve members of the Toll family have been identified in human and mouse. 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. Two of these receptors, TLR2 and TLR4, are pattern recognition receptors and signaling molecules in response to bacterial lipoproteins and have been implicated in innate immunity and inflammation. TLR2 is expressed on the surface of cells and is responsible for distinguishing different pathogens.

Applications Reported

This 6C2 antibody has been reported for use in flow cytometric analysis, immunoprecipitation, and immunohistology staining of frozen tissue sections. Unpublished preliminary studies indicate that this antibody may inhibit some aspects of monocyte activation through TLR2, however, it may not result in complete blocking of TLR2 function. For optimal flow cytometry staining with this antibody, it is recommended that a directly conjugated 6C2 (FITC, PE, or Biotin) be used in combination with FcR blocking with anti-mouse CD16/CD32 (clone 93, cat. 14-0161).

Applications Tested

The 6C2 antibody has been tested by flow cytometric analysis of mouse splenocyte suspensions or Raw264.7 cells. This can be used at less than or equal to 1 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. 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

Gibson FC 3rd, Hong C, Chou HH, Yumoto H, Chen J, Lien E, Wong J, Genco CA. 2004. Innate immune recognition of invasive bacteria accelerates atherosclerosis in apolipoprotein E-deficient mice. *Circulation*. 109(22):2801-6.

Paterson HM, Murphy TJ, Purcell EJ, Shelley O, Kriynovich SJ, Lien E, Mannick JA, Lederer JA. Injury Primes the Innate Immune System for Enhanced Toll-Like Receptor Reactivity. *J Immunol*. 2003 Aug 1;171(3):1473-1483.

Nilsen NJ, Nonstad U, Khan N, Knetter CF, Akira S, Sundan A, Espevik T, Lien E. 2004. Lipopolysaccharide and double-stranded RNA upregulate toll-like receptor 2 independently of myeloid differentiation factor 88. *J Biol Chem*. 279(38):39727-35.

Frasnelli ME, Tarussio D, et al. 2005. TLR2 modulates inflammation in zymosan-induced arthritis in mice. *Arthritis Res Ther*. 7(2):R370-9. (6C2, IHC frozen, PubMed)

Ziegler G, Harhausen D, et al. 2007. TLR2 has a detrimental role in mouse transient focal cerebral ischemia. *Biochem Biophys Res Commun.* 359(3):574-9. (**6C2**, IHC frozen, PubMed)

Hoffmann O, Braun JS, et al. 2007. TLR2 mediates neuroinflammation and neuronal damage. *J Immunol.* 15;178(10):6476-81. (**6C2**, ICC, PubMed)

Related Products

12-4317 Streptavidin PE

13-4813 Anti-Rat IgG Biotin (Polyclonal)

14-4031 Rat IgG2b K Isotype Control Purified

14-8185 B18R Recombinant Protein

34-8185 B18R Recombinant Protein Carrier-Free

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