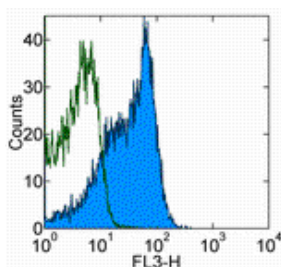


Anti-Human CD284 (TLR4) PE-Cyanine7

Catalog Number: 25-9917

Also Known As: toll-like receptor 4

RUO: For Research Use Only. Not for use in diagnostic procedures.



Staining of cells transfected with human TLR4 with Mouse IgG2a K Isotype Control PE-Cyanine7 (cat. 25-4724) (open histogram) or Anti-Human CD284 (TLR4) PE-Cyanine7 (filled histogram). Total viable cells were used for analysis.

Product Information

Contents: Anti-Human CD284 (TLR4) PE-Cyanine7

REF **Catalog Number:** 25-9917

Clone: HTA125

Concentration: 5 µL (1.0 µg)/test

Host/Isotype: Mouse IgG2a, kappa

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. This tandem dye is sensitive to photo-induced oxidation. Protect this vial from light during storage, handling & experimental procedures.

LOT **Batch Code:** Refer to Vial

Use By: Refer to Vial

Contains sodium azide

Description

The HTA125 monoclonal antibody reacts with human Toll-like receptor 4 (TLR4). So far, at least ten members of the Toll family have been identified in humans. 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. TLR4 physically associates with another molecule called MD-2, and together with CD14, this complex is responsible for LPS recognition and signaling. TLR4 is expressed by peripheral blood monocytes. HTA125 has been reported to immunoprecipitate human TLR4 (~100 kDa) from transfected cells. Most TLR cell surface expression, especially TLR1 and TLR4, occurs at low levels on monocytes and at even lower levels on other cell types including granulocytes and immature dendritic cells (iDC). Furthermore, a relatively high degree of variability in TLR surface expression has been reported among normal donors.

Applications Reported

This HTA125 antibody has been reported for use in flow cytometric analysis.

Applications Tested

This HTA125 antibody has been pre-titrated and tested by flow cytometric analysis of human peripheral blood leukocytes. This can be used at 5 µL (1.0 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 highly recommended that for optimal staining of TLR4, whole blood be stained using the LWB protocol rather than Ficoll-gradient prepared PBMCs. The use of a density gradient appears to reduce the staining intensity significantly.

Light sensitivity: This tandem dye is sensitive photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL cell sample + 100 µL IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency/compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

References

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Akashi, S., H. Ogata, et al. 2000. Regulatory roles for CD14 and phosphatidylinositol in the signaling via toll-like receptor 4-MD-2. *Biochem*

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Mirlashari MR and Lyberg T. 2003. Expression and involvement of Toll-like receptors (TLR)2, TLR4, and CD14 in monocyte TNF-alpha production induced by lipopolysaccharides from Neisseria meningitidis. Med Sci Monit. 9(8):BR316-24. (HTA125, FA, PubMed)

Related Products

25-4724 Mouse IgG2a K Isotype Control PE-Cyanine7

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