

CD284 (TLR4) Monoclonal Antibody (HTA125), eFluor™ 450, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Host/Isotype	Mouse / IgG2a, kappa
Recommended Isotype Control	Mouse IgG2a kappa Isotype Control (eBM2a), eFluor™ 450, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	HTA125
Conjugate	eFluor™ 450
Excitation/Emission Max	405/445 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2848395

Applications	Tested Dilution	Publications
Western Blot (WB)	-	1 Publication
Immunohistochemistry (IHC)	-	1 Publication
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	5 µL (0.5 µg)/test	14 Publications
ELISA (ELISA)	-	1 Publication
Neutralization (Neu)	-	7 Publications

Product Specific Information

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.

It is highly recommended that for optimal staining of TLR4, whole blood be stained using the lysed whole blood protocol (found in Best Protocols) rather than Ficoll-gradient prepared normal human peripheral blood cells. The use of a density gradient

appears to reduce the staining intensity significantly.

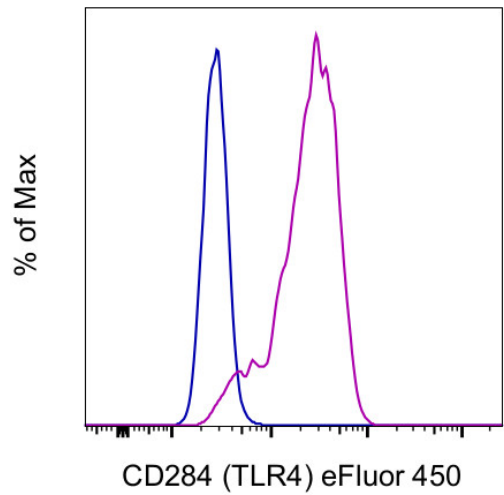
Applications Reported: This HTA125 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This HTA125 antibody has been pre-diluted and tested by flow cytometric analysis of cells transfected with human TLR4. This may be used at 5 µL (0.5 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.

eFluor 450 is an alternative to Pacific Blue. eFluor 450 emits at 446 nm and is excited with the violet laser line (405 nm). Please make sure that your instrument is capable of detecting this fluorochrome.

Excitation: 405 nm; Emission: 445 nm; Laser: Violet Laser

Product Images For CD284 (TLR4) Monoclonal Antibody (HTA125), eFluor™ 450, eBioscience™



CD284 (TLR4) Antibody (48-9917-42) in Flow
TLR4/MD2-transfected cells were stained with Mouse IgG2a kappa Isotype Control, eFluor 450 (Product # 48-4724-82) (blue histogram) or CD284 (TLR4) Monoclonal Antibody, eFluor 450 (purple histogram). Viable cells were used for analysis, as determined by Fixable Viability Dye eFluor 780 (Product # 65-0865-18).

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Western Blot (1)

Innate immunity	Year 2021
Lys694Arg polymorphism leads to blunted responses to LPS by interfering TLR4 with recruitment of MyD88.	
"Published figure using CD284 (TLR4) monoclonal antibody (Product # 48-9917-42) in Western Blot"	
Authors: Yang Y,Hu Y,Zhou Y,Liang T,Tang H,Ju H,Shi Q,Fang H	

Immunohistochemistry (1)

PloS one	Year 2015
Biologically active polymers from spontaneous carotenoid oxidation: a new frontier in carotenoid activity.	
"Published figure using CD284 (TLR4) monoclonal antibody (Product # 48-9917-42) in Immunocytochemistry"	
Authors: Johnston JB,Nickerson JG,Daroszewski J,Mogg TJ,Burton GW	

Immunocytochemistry (1)

Infection and immunity	Year 2000
Toll-like receptors confer responsiveness to lipopolysaccharide from Porphyromonas gingivalis in human gingival fibroblasts.	
"Published figure using CD284 (TLR4) monoclonal antibody (Product # 48-9917-42) in Immunocytochemistry"	
Authors: Tabeta K,Yamazaki K,Akashi S,Miyake K,Kumada H,Umemoto T,Yoshie H	

Flow Cytometry (14)

Frontiers in pharmacology	Year 2021
Grindelia squarrosa Extract and Grindelic Acid Modulate Pro-inflammatory Functions of Respiratory Epithelium and Human Macrophages.	
"Published figure using CD284 (TLR4) monoclonal antibody (Product # 48-9917-42) in Flow Cytometry"	
Authors: Gierlikowska B,Filipek A,Gierlikowski W,Kania D,Stefaska J,Demkow U,Kiss AK	

[View more Flow references on thermofisher.com](#)

More applications with references on thermofisher.com

- ELISA (1)
- Neu (7)

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