

# CD284 (TLR4) Monoclonal Antibody (HTA125), Alexa Fluor 488, eBioscience™

Product Details	
Size	100 Tests
Species	Human
Published Species	Shark, Human, Mouse
Expression System	Mouse / IgG2a, kappa
Recommended Isotype Control	Mouse IgG2a kappa Isotype Control (eBM2a), Alexa Fluor 488, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	HTA125
Conjugate	Alexa Fluor® 488
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin, 0.2% BSA
Contains	0.09% sodium azide
Storage Conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_1963634

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (1 µg)/test	15 Publications
ELISA (ELISA)	-	1 Publication
Functional Assay (FN)	-	1 Publication
Immunocytochemistry (ICC)	-	1 Publication
Immunofluorescence (IF)	-	5 Publications
Immunohistochemistry (Paraffin) (IHC (P))	-	1 Publication
Miscellaneous PubMed (Misc)	-	1 Publication
Neutralization (Neu)	-	4 Publications
Western Blot (WB)	-	3 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.

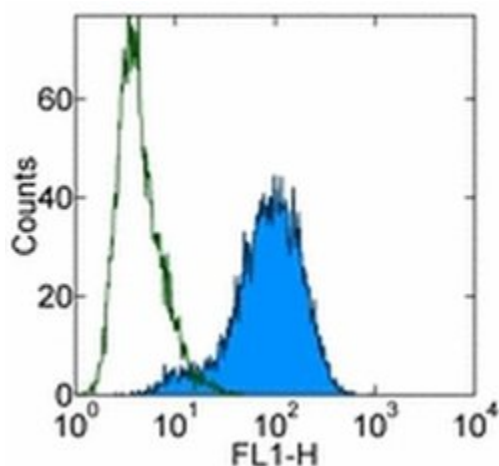
Applications Tested: This HTA125 antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5  $\mu$ L (1  $\mu$ g) per test. A test is defined as the amount ( $\mu$ g) of antibody that will stain a cell sample in a final volume of 100  $\mu$ L. Cell number should be determined empirically but can range from  $10^5$  to  $10^8$  cells/test.

Furthermore brighter fluorophores such as the APC and PE are better choices for looking at endogenous levels of TLR4.

Excitation: 488 nm; Emission: 519 nm; Laser: Blue Laser.

Filtration: 0.2  $\mu$ m post-manufacturing filtered.

### Product Images For CD284 (TLR4) Monoclonal Antibody (HTA125), Alexa Fluor 488, eBioscience™



#### CD284 (TLR4) Antibody (53-9917-42) in Flow

Staining of human TLR4/MD2-transfected cells with staining buffer (autofluorescence) (open histogram) or Anti-Human CD284 (TLR4) Alexa Fluor® 488 (filled histogram). Total viable cells were used for analysis.

[View more figures on thermofisher.com](https://www.thermofisher.com)

## Flow Cytometry (15)

International journal of molecular medicine

### Bacterial lipopolysaccharide and antimicrobial LL-37 enhance ICAM-1 expression and NF-B p65 phosphorylation in senescent endothelial cells.

"Published figure using CD284 (TLR4) monoclonal antibody (Product # 53-9917-42) in Flow Cytometry"

Authors: Suzuki K,Ohkuma M,Nagaoka I

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2019

Oncology letters

### Butyrate upregulates the TLR4 expression and the phosphorylation of MAPKs and NK-B in colon cancer cell *in vitro*.

"Published figure using CD284 (TLR4) monoclonal antibody (Product # 53-9917-42) in Flow Cytometry"

Authors: Xiao T,Wu S,Yan C,Zhao C,Jin H,Yan N,Xu J,Wu Y,Li C,Shao Q,Xia S

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2018

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

## Neutralization (4)

Molecular medicine reports

### ToILike receptor 4 promotes the phosphorylation of CRMP2 via the activation of Rhokinase in MCAO rats.

"Published figure using CD284 (TLR4) monoclonal antibody (Product # 53-9917-42) in Neutralization"

Authors: Li XB,Ding MX,Ding CL,Li LL,Feng J,Yu XJ

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2018

Lipids in health and disease

### Lipopolysaccharide induces SBD-1 expression via the P38 MAPK signaling pathway in ovine oviduct epithelial cells.

"Published figure using CD284 (TLR4) monoclonal antibody (Product # 53-9917-42) in Neutralization"

Authors: Li Q,Bao F,Zhi D,Liu M,Yan Q,Zheng X,Ren L,Cong S,Li Y,Cao G

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2016

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

## More applications with references on thermofisher.com

WB (3) IF (5) ICC (1) Misc (1) ELISA (1) IHC (P) (1) FN (1)

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