

Technical Data Sheet

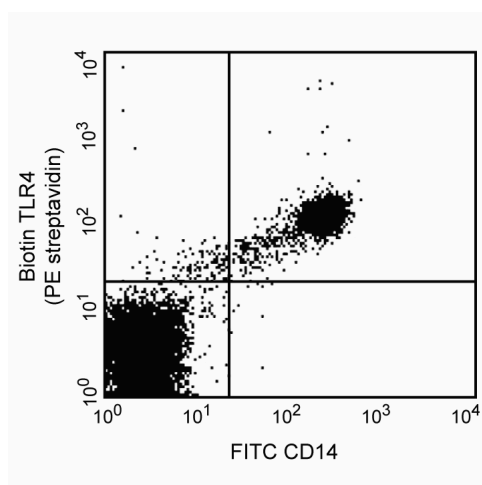
Biotin Mouse Anti-Human Toll-Like Receptor 4

Product Information

Material Number:	551975
Alternate Name:	TLR4, CD284
Size:	100 tests
Vol. per Test:	20 µl
Clone:	HTA125
Immunogen:	Human TLR4-transfected Ba/F3 cell line
Isotype:	Mouse IgG2a, κ
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The monoclonal antibody HTA125 reacts with the human Toll-like receptor 4 (TLR4). Toll-like receptors (TLR) are type I transmembrane proteins characterized by an extracellular domain containing leucine-rich repeats and a cytoplasmic domain similar to IL-1R family. In human, ten TLR have been identified so far. The TLR family acts as pattern-recognition receptor is the essential component of pathogen recognition and innate immunity. TLR4 has been identified as the receptor for Gram-negative bacterial LPS. TLR4 mRNA has been found in spleen, placenta, ovary, intestine and lung. Using HTA125, TLR4 protein expression has been detected in monocytes, B cells, and T cells in human peripheral blood. Human TLR4 gene has been mapped to chromosome 9q32. The immunogen used to generate HTA125 hybridoma was human TLR4-transfected Ba/F3 cell line.



Detection of TLR4 expression on human peripheral monocytes by biotinylated anti-human TLR4 antibody HTA125 (Cat. No. 551975). Human PBMC were stained with 20 µl of biotinylated HTA125 using 2-step staining procedure with Streptavidin-phycoerythrin (Cat. No. 554061) and anti-human CD14-FITC (Cat. No. 555397).

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with biotin under optimum conditions, and unreacted biotin was removed.

Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

Flow cytometry	Routinely Tested
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Recommended Assay Procedure:

The biotinylated HTA125 antibody can be used for the immunofluorescent staining along with Streptavidin-phycoerythrin (Cat. No. 554061) for flow cytometric analyses of human leukocytes and cell lines that express TLR4 (see Figure).

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Suggested Companion Products

Catalog Number	Name	Size	Clone
554061	PE Streptavidin	0.5 mg	(none)
555397	FITC Mouse Anti-Human CD14	100 tests	M5E2
555572	Biotin Mouse IgG2a, κ Isotype Control	100 tests	G155-178

Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 X 10⁶ cells in a 100- μ l experimental sample (a test).
2. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
3. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
5. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.

References

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