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Monoclonal Antibody to CD284 / TLR4 - PE

Alternate names: Toll-like receptor 4

Catalog No.: SM1677RT

Quantity: 25 Tests

Background: TLR4, also known as CD284, has been demonstrated to act as a receptor for LPS on human monocytes and macrophages. TLR4 signalling of LPS stimulation requires the presence of the MD-2 molecule. TLR4 is weakly expressed by resting cells, but is upregulated following stimulation with LPS.

Uniprot ID: O00206

NCBI: NM_138554.3

Host / Isotype: Mouse / IgG2a

Clone: HTA125

Immunogen: Ba/F3 cell line expressing TLR4 (CD284).
Spleen cells from immunised Balb/c mice were fused with cells of the mouse SP2/0 myeloma cell line.

Format: **State:** Lyophilized purified IgG fraction.
Purification: Affinity Chromatography on Protein G.
Buffer System: PBS containing 0.09% Sodium Azide as preservative and 1% BSA as stabilizer.
Label: PE – R. Phycoerythrin (RPE)
Reconstitution: Restore in 0.25 ml disilled water.

Applications: Flow Cytometry: use 10 µl of neat antibody to label 10e6 cells or 100 µl whole blood.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

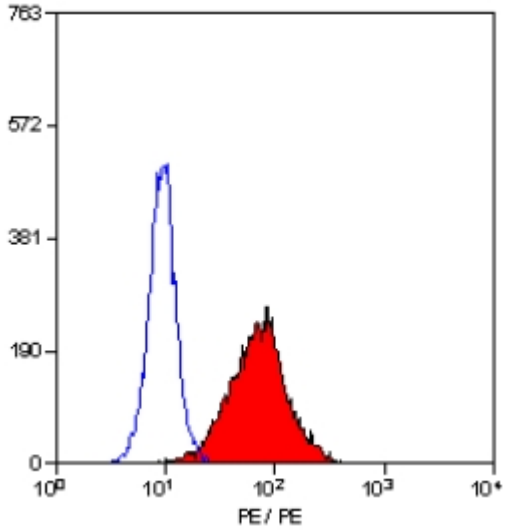
Specificity: This antibody recognises the Toll like receptor 4 (TLR4) cell surface antigen.
It has been demonstrated That this antibody blocks the activation of monocytes with LPS.
We recommend the use of SM1677LE for this purpose.
Species: Human, Rhesus Monkey, Guinea Pig, Pig and Dog.
Other species not tested.

Storage: Store the antibody undiluted at 2-8°C.
DO NOT FREEZE!
This product is photosensitive and should be protected from light.
Shelf life: one year from despatch.

General References:
1. Shimazu, R. et al. (1999) MD-2, a molecule that confers lipopolysaccharide responsiveness on Toll like receptor 4. J. Exp. Med. 189: 1777.
2. Jiang, Q. et al. (2000) Cutting edge: lipopolysaccharide induces physical proximity between CD14 and Toll like receptor 4 (TLR4) prior to nuclear translocation of NF-Kappa B. J.

Immunol. 165: 3541-3544.
3. Jiang, Q. et al. (2000) Lipopolysaccharide induces physical proximity between CD14 and Toll like receptor 4 (TLR4) prior to nuclear translocation of NF-Kappa B. J. Immunol. 165: 3541-3544.
4. Yang, S. et al. (2001) Synergistic effect of muramyldipeptide with lipopolysaccharide or lipoteichoic acid to induce inflammatory cytokines in human monocytic cells in culture. Infect. Immun. 69: 2045-2053.
5. Triantafilou, M. et al. (2002) Mediators of innate immune recognition of bacteria concentrate in lipid rafts and facilitate lipopolysaccharide-induced cell activation. J. Cell Sci. 115: 2603-2611.
6. Kawahara, T. et al. (2001) Type I Helicobacter pylori lipopolysaccharide stimulates toll-like receptor 4 and activates mitogen oxidase 1 in gastric pit cells. Infect. Immun. 69: 4382-4839.

Pictures:



Staining of U937 cells with Mouse Anti Human CD284-RPE (SM1677RT).