SONY

Product Data Sheet

Purified anti-mouse CD284 (TLR4)

Catalog # / Size: 1327010 / 100 µg
1327005 / 25 µg

Clone: SA15-21

Isotype: Rat IgG2a, κ

Immunogen: LPS-stimulated TLR4/MD-2/CD14 cotransfected NKR cells.

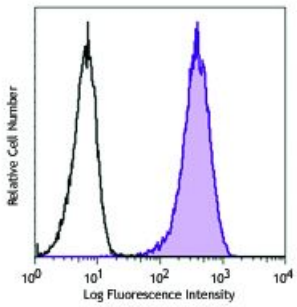
Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Workshop Number: 750 under optimal conditions.

Concentration: 0.5



Mouse TLR4/MD2 transfected cells were stained with purified TLR4 (clone SA15-21, filled histogram) or purified rat IgG2a, κ(open histogram), followed by anti-rat IgG PE.

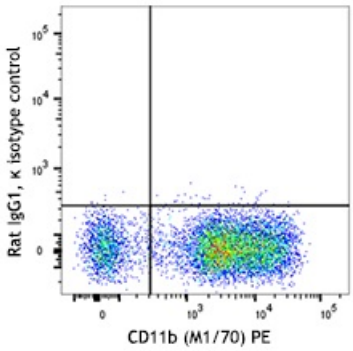
Applications:

Applications: Flow Cytometry, Immunoprecipitation

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤0.5 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Anti-mouse TLR4 clones SA15-21 and MTS510 recognize distinct epitopes and don't cross block each other.[1] Clone MTS510 binds to an epitope of TLR4/MD-2 that is lost after LPS stimulation.[1] Unlike MTS510, the binding of SA15-21 is not interrupted by LPS stimulation[1]. Clone SA15-21 is capable of recognizing TLR4 individually and when it is complexed with MD-2.

Additional reported applications (for the relevant formats) include: immunoprecipitation[1] and inhibition of LPS-induced hepatocyte apoptosis[2].



C57BL/6 mouse bone marrow cells were stained with CD150 (SLAM) (clone TC15-12F12.2) APC/Fire™ 750 (filled histogram) or rat IgG2a, κ APC/Fire™ 750 isotype control (open histogram).

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Application References:

1. Akashi S, *et al.* 2003. *J. Exp. Med.* 198:1035. (IP)
2. Wakabayashi Y, *et al.* 2006. *J. Immunol.* 177:1772. (Block)
3. Visintin A, *et al.* 2006. *J. Leukoc. Biol.* 80:1584. (FC)
4. Shibata T, *et al.* 2011. *Int. Immunol.* 23:503. (FC)

Description: Toll-like receptors are highly conserved from Drosophila to humans and share structural and functional similarities. They are type I transmembrane signaling receptors which activate the innate immune system in response to pathogen invasion. So far, at least 13 TLR members have been identified. The secretory protein, MD2, associates with cell-surface bound TLR4 (CD284) on monocytes, B cells, and T cells. TLR4 has been recognized as critical for host recognition of LPS in conjunction with MD2.

Antigen References:

1. Brennan TV, *et al.* 2012. *Blood* 120:2899.
2. Wantia N, *et al.* 2011. *PLoS One* 6:e26101.
3. Loser K, *et al.* 2010. *Nat. Med.* 16:713.
4. Kang S, *et al.* 2009. *Blood* 113:2605.

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