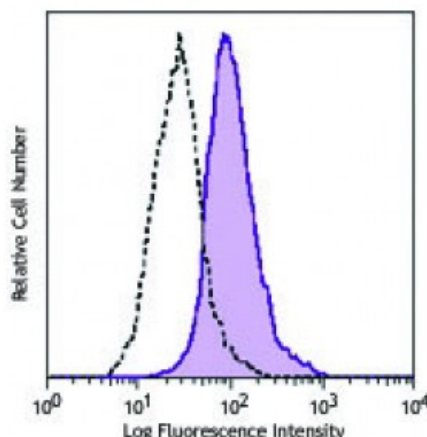


PE/Cy7 anti-mouse CD284 (TLR4)

Catalog # / Size:	1327035 / 25 µg 1327040 / 100 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 and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/Cy7 and unconjugated antibody.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Concentration:	0.2



Thioglycollate-elicited C57BL/6 mouse peritoneal macrophages were stained with TLR4 (clone SA15-21) PE/Cy7 (filled histogram) or rat IgG2a, κ PE /Cy7 isotype control (open histogram).

Applications:

Applications: Flow Cytometry

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 microg per million cells in 100 microL 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: immunoprecipitation¹ and inhibition of LPS-induced hepatocyte apoptosis². The LEAF™ or Ultra-LEAF™ purified antibody is recommended for functional assays (contact our [custom solutions team](#)).

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*