

**Alexa Fluor® 488 anti-human CD282 (TLR2)**

**Catalog # / Size:** 2148560 / 100 tests

**Clone:** TL2.1

**Isotype:** Mouse IgG2a,  $\kappa$

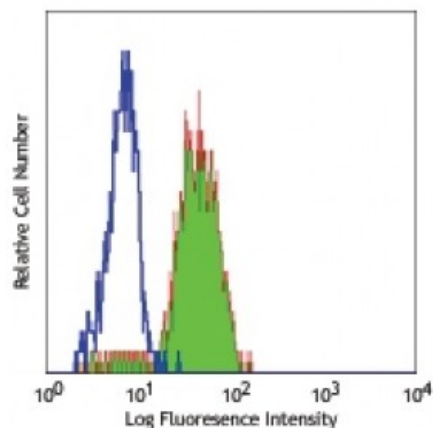
**Immunogen:** Human TLR2-transfected CHO cells

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 488 under optimal conditions.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

**Concentration:** Lot-specific



Human peripheral blood monocytes stained with TL2.1 Alexa Fluor® 488

**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 5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

\* Alexa Fluor® 488 has a maximum emission of 519 nm when it is excited at 488 nm.

**Application Notes:** The TL2.1 antibody is useful for blocking studies. It has been reported to block TLR2 agonist-induced cellular activation. Additional reported applications (for the relevant formats) include: inhibition of PGP activity and blocking of cytokine production<sup>1,3,7</sup>, immunoprecipitation<sup>1</sup>, immunohistochemistry of 4% paraformaldehyde-fixed frozen sections<sup>2</sup> and immunohistochemistry of HOPE-fixed (HEPES-glutamic acid buffer-mediated organic solvent protection effect) paraffin-embedded sections<sup>4</sup>, and Western blotting<sup>2</sup>. The LEAF™ purified antibody (Endotoxin <0.1 EU/μg, Azide-Free, 0.2 μm filtered) is recommended for functional assays (Cat. No. 309709). For highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 309716) with a lower endotoxin limit than standard LEAF™ purified antibodies (Endotoxin <0.01 EU/microg).

- Application References:**
1. Flo T, *et al.* 2000. *J. Immunol.* 164:2064.
  2. Faure E, *et al.* 2001. *J. Immunol.* 166:2018.
  3. Sugawara S, *et al.* 2001. *Infect. Immun.* 69:4951.
  4. Droemann D, *et al.* 2003. *Histochem. Cell Biol.* 119:103.
  5. Chavakis E, *et al.* 2007. *Circ. Res.* 100:204. [PubMed](#)
  6. Fiala M, *et al.* 2007. *Proc. Natl. Acad. Sci. USA* 10.1073/P. Natl. Acad. Sci. USA.0701267104.
  7. Goo SY, *et al.* 2007. *J. Biol. Chem.* doi:10.1074/jbc.M701876200. [PubMed](#)
  8. Weiss DJ, *et al.* 2008. *J. Leukoc. Biol.* 83:48. [PubMed](#)
  9. Harris, KM., *et al.* 2011. *J. Leukoc Biol.* 90:727. [PubMed](#).

**Description:** Toll-like receptors are type I transmembrane signaling receptors which are critical

for the innate host defense to pathogens. Toll-like receptor 2 (TLR2), known as CD282, has been identified as a receptor that is central to the innate immune system's response to lipoproteins of Gram-negative bacteria and Gram-positive bacteria, as well as a receptor for peptidoglycan and lipoteichoic acid and other bacterial cell membrane products.

**Antigen  
References:**

1. Lien E, *et al.* 1999. *J. Biol. Chem.* 274:33419.
2. Lien E, *et al.* 2001. *J. Biol. Chem.* 276:1873.
3. Sabroe I, *et al.* 2002. *J. Immunol.* 168:4701