

Anti-Mouse TLR4/MD-2 Complex SAFIRE Purified

Catalog Number :74812-25

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Clone: MTS510

Format/Conjugate: SAFIRE Purified

Concentration: 0.5 mg/mL

Reactivity: Mouse

Laser: Not Applicable

Peak Emission: Not Applicable

Peak Excitation: Not Applicable

Filter: Not Applicable

Brightness (1=dim,5=brightest): Not Applicable

Isotype: Rat IgG2a, kappa

Formulation: Phosphate-buffered aqueous solution, pH7.2.

Storage: Product should be kept at 2-8°C and protected from prolonged exposure to light.

Applications: FC, FA

Description

The MTS510 monoclonal antibody specifically reacts with the Toll-Like Receptor 4 (TLR-4) and MD-2 (LY96) molecular complex. The complex of TLR-4, MD-2, and CD14 regulates the innate immune system recognition of bacterial lipopolysaccharides (LPS) and is expressed on the surface of thioglycollate-elicited macrophages. The epitope that binds the MTS510 antibody is lost after LPS stimulation and the antibody can be used to co-immunoprecipitates MD-2 and TLR4.

Preparation & Storage

The product should be stored undiluted at 4°C. Do not freeze. The monoclonal antibody was purified utilizing affinitychromatography. The endotoxin level is determined by LAL test to be less than 0.01 EU/μg of the protein.

Application Notes

The antibody has been analyzed for quality through the flow cytometric analysis of the relevant cell type. It is recommended that the reagent be titrated for optimal performance for each application.

References

- 1.Akashi, S., Saitoh, S. I., Wakabayashi, Y., Kikuchi, T., Takamura, N., Nagai, Y., ... Miyake, K. (2003). Lipopolysaccharide Interaction with Cell Surface Toll-like Receptor 4-MD-2 Higher Affinity than That with MD-2 or CD14.;The Journal of experimental medicine,;198(7), 1035-1042.
2. Qi, H. Y., Shelhamer, J. H. (2005). Toll-like receptor 4 signaling regulates cytosolic phospholipase A2 activation and lipid generation in lipopolysaccharide-stimulated macrophages.;Journal of Biological Chemistry,280(47), 38969-38975.
3. Shimazu, R., Akashi, S., Ogata, H., Nagai, Y., Fukudome, K., Miyake, K., Kimoto, M. (1999). MD-2, a molecule that confers lipopolysaccharide responsiveness on Toll-like receptor 4.;The Journal of experimental medicine,189(11), 1777-1782.