

Rat Anti-Mouse TLR4/MD-2 Clone MTS510, Monoclonal Antibody

Catalog No: MON4032

Quantity: 1 ml

Clone: MTS510

Specificity: Toll-like receptors (TLR) are highly conserved throughout evolution and have been

implicated in the innate defense to many pathogens. In Drosophila toll is required for the anti-fungal response, while the related 18-wheeler is involved in antibacterial defenses. In mammals, TLR identified as type I transmembrane signaling receptors with pattern recognition capabilities, have been implicated in the innate host defense

to pathogens.

TLR4 has been identified next to MD-2 and CD14 as a receptor that is central to the innate immune response to lipopolysaccharides (LPS) of Gram-negative bacteria.

The MTS510 monoclonal antibody reacts preferentially, especially in flow cytometry, with murine TLR4 that is associated with MD-2. MTS510 is a TLR4 function-blocking antibody that is useful for studies on the role of TLR4 as a receptor for LPS induced cytokine production by TLR4 bearing cells. The antibody was shown to coprecipitate

MD-2 (30 kDa) with TLR4 (100 kDa).

Immunoglobulin type Rat lgG_{2a}

Use: The antibody can be used for flow cytometry and immunoprecipitation. The antibody

recognizes the murine TLR4/MD-2 complex and is not useful for detection of TLR4 alone. Furthermore the antibody can be used as antagonist for TLR4, it blocks LPS-

induced cytokine production.

Instructions for Use: For flow cytometry dilutions to be used depend on detection system applied. It is

recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:10. Before use in biological assays, the product must be filter sterilized and depending on the concentration to be used

dialyzed against culture medium to remove the sodium azide added.

Presentation: 1 ml (100 μg/ml) purified antibody solution in PBS, containing 0.02% sodium azide

and 0.1% BSA.

Literature: 1. Nomura, F et al; Cutting edge., J. Immunol 2000, 164: 3471

2. Akashi, S et al; Cutting edge., J Immunol 2000, 164: 3471

3. Tapping, RI et al; Toll like receptor 4, J. Immunol 2000, 165: 5780

Toll Free: 888 769-1246

Phone: 781 828-0610

Fax: 781 828-0542

4. Sato, S et al; Synergy and cross-tolerance between toll-like receptor, J. Immunol

E-mail: info@cellsciences.com

Web Site: www.cellsciences.com

2000, 165: 7096.

cellsciences.com

Also available: MON4032B: Biotin conjugate version

0.5 ml (100 µg/ml) biotinylated purified antibody solution in PBS containing 0.1% BSA

and sodium azide.

Storage: Product should be stored at 4°C. Product is stable for one year under recommended

storage conditions.

NOT FOR HUMAN USE. FOR RESEARCH ONLY. NOT FOR DIAGNOSTIC OR THERAPEUTIC USE.

Toll Free: 888 769-1246 E-mail: info@cellsciences.com
Web Site: www.cellsciences.com
Fax: 781 828-0542