

## Active Recombinant Mouse Tlr4 Protein, Fc-tagged

Cat. No. Tlr4-02M Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant Mouse TLR4 (Asn26-Lys629) protein with a mouse IgG2a (Glu98-Lys330) Fc tag was expressed in chinese hamster ovary cell line.
<b>Species</b>	Mouse
<b>Source</b>	CHO
<b>ProteinLength</b>	26-629
<b>Description</b>	<p>This gene belongs to the evolutionarily-conserved Toll-like receptor family, whose members are type-1 transmembrane proteins that are involved in innate immunity. Toll-like receptors are characterized by an extracellular leucine-rich repeat domain that functions in ligand recognition and an intracellular toll/interleukin-1 receptor-like domain that is crucial for signal transduction. The receptor encoded by this gene mediates the innate immune response to bacterial lipopolysaccharide, a major component of the outer membrane of Gram-negative bacteria, through synthesis of pro-inflammatory cytokines and chemokines. In addition, this protein can recognize other pathogens from Gram-negative and Gram-positive bacteria as well as viral components. Mice deficient in this gene display a number of immune response-related phenotypes including hyporesponsiveness to bacterial lipopolysaccharide and increased levels of respiratory syncytial virus compared to controls.</p>
<b>Form</b>	Disulfide-linked homodimer
<b>Bio-activity</b>	Measured by its binding ability in a functional ELISA. When Recombinant Mouse

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	TLR4 Fc Chimera is immobilized at 2 µg/mL, 100 µL/well, the concentration of Recombinant Human MD-2 that produces 50% of the optimal binding response is approximately 0.15-0.9 µg/mL
<b>Molecular Mass</b>	96 kDa
<b>N-terminal Sequence Analysis</b>	Asn26
<b>Endotoxin</b>	< 0.10 EU/µg of the protein by the LAL method.
<b>Purity</b>	> 90%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
<b>Storage</b>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
<b>Storage Buffer</b>	Lyophilized from a 0.2 µm filtered solution in PBS.
<b>Reconstitution</b>	Reconstitute at 500 µg/mL in PBS.
<b>Shipping</b>	The product is shipped with polar packs.
<b>GENE INFORMATION</b>	
<b>Gene Name</b>	Tlr4 toll-like receptor 4 [ <i>Mus musculus</i> (house mouse) ]
<b>Official Symbol</b>	Tlr4

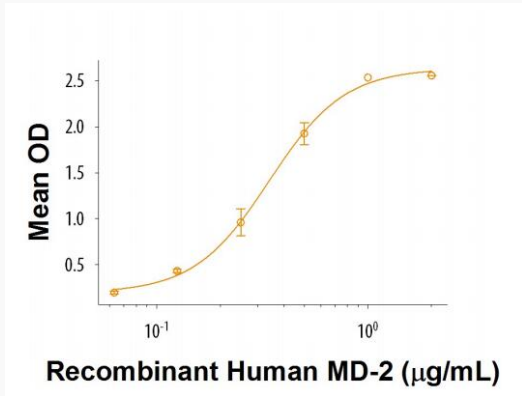
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<b>Synonyms</b>	Tlr4; toll-like receptor 4; Lps; Ras; Ly87; Ran/M1; Rasl2-8; toll-like receptor 4; Toll like receptor 4; lipopolysaccharide response; EC 3.2.2.6
<b>Gene ID</b>	21898
<b>mRNA Refseq</b>	NM_021297
<b>Protein Refseq</b>	NP_067272
<b>UniProt ID</b>	Q9QUK6

**Bioactivity**



When Recombinant Mouse TLR4 Fc Chimera is coated at 2 µg/mL (100 µL/well), Recombinant Human MD-2 binds with a typical ED50 of 0.15-0.9 µg/mL.

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