

Recombinant Rat TLR2/CD282 Protein (His Tag)

Catalog Number: PKSR030182

Note: Centrifuge before opening to ensure complete recovery of vial contents.

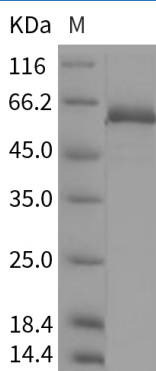
Description

Species	Rat
Source	Baculovirus-Insect Cells-derived Rat TLR2/CD282 protein Met1-Gln587, with an C-terminal His
Calculated MW	67.5 kDa
Observed MW	60 kDa
Accession	Q6YGU2
Bio-activity	Not validated for activity

Properties

Purity	> 90 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80 °C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile 20mM Tris, 500mM NaCl, pH 7.4, 10% glycerol Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 90 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

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TLR2, also known as CD282, is a member of the Toll-like receptor (TLR) family. TLRs are highly conserved from *Drosophila* to humans and share structural and functional similarities. They play a fundamental role in pathogen recognition and activation of innate immunity. They recognize pathogen-associated molecular patterns (PAMPs) that are expressed on infectious agents, and mediate the production of cytokines necessary for the development of effective immunity. The various TLRs exhibit different patterns of expression. TLR2 contains 14 LRR (leucine-rich) repeats and 1 TIR domain. TLR2 gene is expressed most abundantly in peripheral blood leukocytes, and mediates host response to Gram-positive bacteria and yeast via stimulation of NF-kappaB. CD282 cooperates with LY96 to mediate the innate immune response to bacterial lipoproteins and other microbial cell wall components. It also cooperates with TLR1 to mediate the innate immune response to bacterial lipoproteins or lipopeptides. CD282 acts via MYD88 and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response. It may also promote apoptosis in response to lipoproteins.