Rhesus macaque TLR3 / CD283 Protein, Fc Tag (MALS verified)

Catalog # TL3-R5253

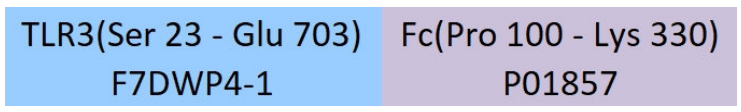
Synonym

TLR3,CD283,IIAE2

Source

Rhesus macaque TLR3 Protein, Fc Tag(TL3-R5253) is expressed from human 293 cells (HEK293). It contains AA Ser 23 - Glu 703 (Accession # F7DWP4-1). Predicted N-terminus: Ser 23

Molecular Characterization



This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 103.4 kDa. The protein migrates as 130-160 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μm filtered solution in 50 mM Tris, 100 mM Glycine, 25 mM Arginine, 150 mM NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

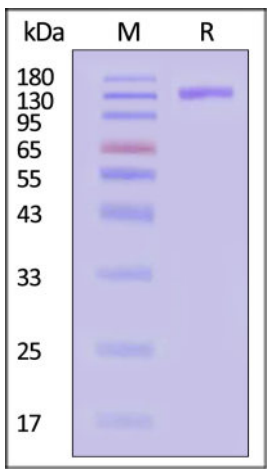
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

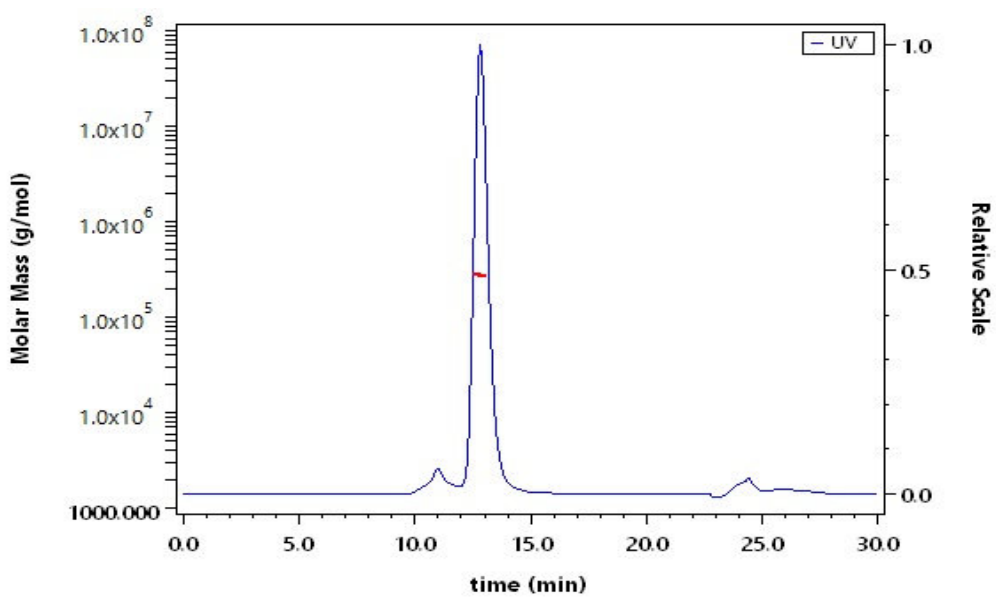
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Rhesus macaque TLR3 Protein, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS



The purity of Rhesus macaque TLR3 Protein, Fc Tag (Cat. No. TL3-R5253) is more than 90% and the molecular weight of this protein is around 260-290 kDa verified by SEC-MALS.
Report

Background

Toll-like receptor 3 (TLR3) is also known as CD283, which belongs to the Toll-like receptor family which plays a fundamental role in pathogen recognition and activation of innate immunity. TLRs (Toll-like receptors) control host immune response against pathogens through recognition of molecular patterns specific to microorganisms. TLR3 / CD283 contains 22 LRR (leucine-rich) repeats, 1 LRRCT domain, 1 LRRNT domain and 1 TIR domain. TLR3 is expressed at high level in placenta and pancreas and also detected in CD11c+ immature dendritic cells. CD283 / TLR3 is only expressed in dendritic cells. TLR3 is the TLR that is expressed most strongly in the brain, especially in astrocytes, glia, and neurons. CD283 / TLR-3 is the key component of innate and adaptive immunity. TLR3 / CD283 is a nucleotide-sensing TLR which is activated by double-stranded RNA, a sign of viral infection. TLR3 acts via MYD88 and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response. Defects in TL-R3 are associated with herpes simplex encephalitis type 2 (HSE2).