

**Synonym**

TLR3,CD283,IIAE2

**Source**

Human TLR3, Fc Tag (TL3-M5255) is expressed from human 293 cells (HEK293). It contains AA Thr 26 - Leu 705 (Accession # [Q99MB1-1](#)).

Predicted N-terminus: Thr 26

**Molecular Characterization**

TLR3(Thr 26 - Leu 705) Q99MB1-1	Fc(Pro 100 - Lys 330) P01857
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This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 103.7 kDa. The protein migrates as 125-150 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

>95% 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. Normally trehalose is added as protectant before lyophilization.

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**

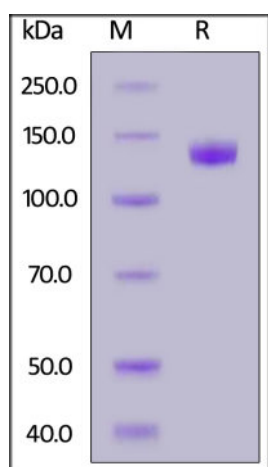
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

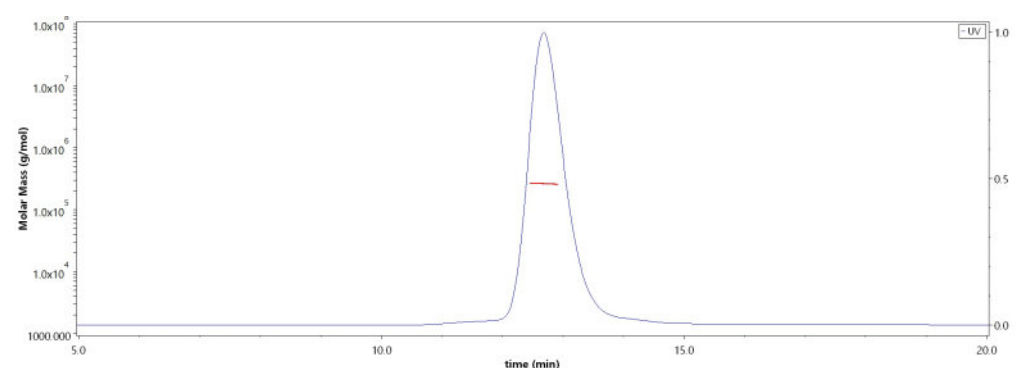
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

**SDS-PAGE**



Human TLR3, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

**SEC-MALS**



The purity of Human TLR3, Fc Tag (Cat. No. TL3-M5255) is more than 90% and the molecular weight of this protein is around 235-287 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<sup>+</sup> 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).

### **Clinical and Translational Updates**

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.