



Recombinant Protein Technical Manual  
Recombinant Mouse TLR3/CD283 Protein (His Tag)  
RPES3549

#### Product Data:

**Product SKU:** RPES3549

**Size:** 50µg

**Species:** Mouse

**Expression host:** HEK293 Cells

**Uniprot:** NP\_569054.2

#### Protein Information:

**Molecular Mass:** 78.7 kDa

**AP Molecular Mass:** 10010 kDa

**Tag:** C-His

**Bio-activity:**

**Purity:** > 97 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg of the protein as determined by the LAL method.

**Storage:** 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 PBS, pH 7.4

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:**

**Synonyms:** AI957183;Tlr3

## Immunogen Information:

**Sequence:** Met 1-Leu 705

## Background:

Toll-like receptor 3 (TLR3) also known as CD283 (cluster of differentiation 283) is a member of the Toll-like receptor family of pattern recognition receptors of the innate immune system. TLR3/CD283 plays a fundamental role in pathogen recognition and activation of innate immunity. TLR3 is a nucleotide-sensing TLR which is activated by double-stranded RNA, a sign of viral infection. TLRs are highly conserved from *Drosophila* to humans and share structural and functional similarities. 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. This receptor is most abundantly expressed in placenta and pancreas, and is restricted to the dendritic subpopulation of the leukocytes. It recognizes dsRNA associated with viral infection, and induces the activation of NF-kappaB and the production of type I interferons. It may thus play a role in host defense against viruses.