

### Synonym

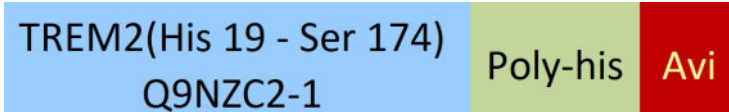
Triggering receptor expressed on myeloid cells 2, TREM2, TREM-2

### Source

Biotinylated Human TREM2, His,Avitag(TR2-H82E7) is expressed from human 293 cells (HEK293). It contains AA His 19 - Ser 174 (Accession # [Q9NZC2-1](#)).

Predicted N-terminus: His 19

### Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™)

The protein has a calculated MW of 21.0 kDa. The protein migrates as 29-40 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE) due to glycosylation.

### Labeling

*Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.*

### Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

### Endotoxin

Less than 1.0 EU per µg by the LAL method.

### Purity

>90% as determined by SDS-PAGE.

### Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 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

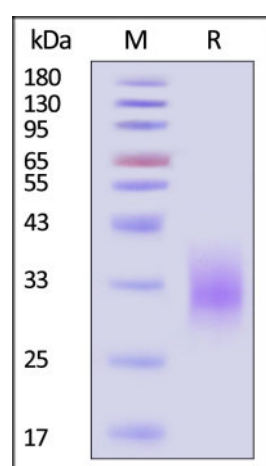
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

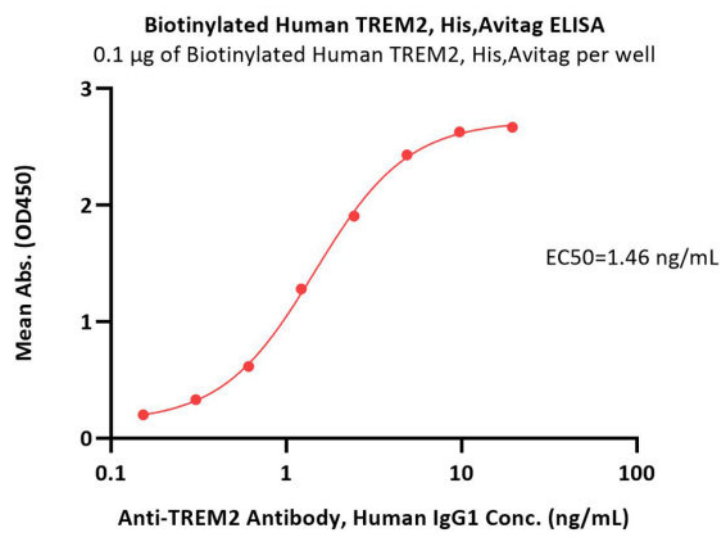
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

### SDS-PAGE



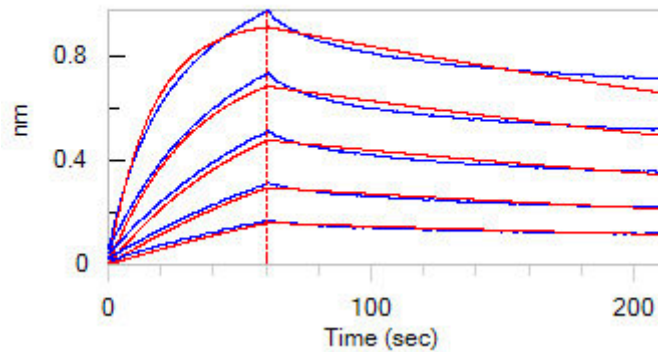
Biotinylated Human TREM2, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

### Bioactivity-ELISA

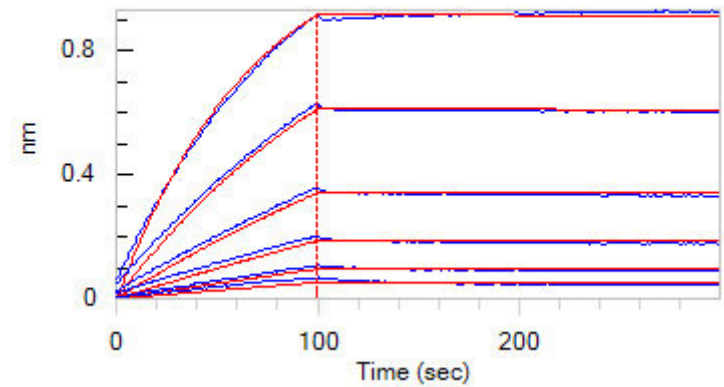


Immobilized Biotinylated Human TREM2, His,Avitag (Cat. No. TR2-H82E7) at 1 µg/mL (100 µL/well) on streptavidin (Cat. No. STN-N5116) precoated (2 µg/well) plate can bind Anti-TREM2 Antibody, Human IgG1 with a linear range of 0.2-2 ng/mL (QC tested).

**Bioactivity-BLI**



Loaded Biotinylated Human TREM2, His,Avitag (Cat. No. TR2-H82E7) on SA Biosensor, can bind Human APOE3, His Tag (Cat. No. APE-H5246) with an affinity constant of 37.1 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



Loaded Biotinylated Human TREM2, His,Avitag (Cat. No. TR2-H82E7) on SA Biosensor, can bind Human APOE2 (R154S), His Tag (Cat. No. APE-H5256) with an affinity constant of 2.08 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

**Background**

This gene encodes a membrane protein that forms a receptor signaling complex with the TYRO protein tyrosine kinase binding protein. The encoded protein functions in immune response and may be involved in chronic inflammation by triggering the production of constitutive inflammatory cytokines. Defects in this gene are a cause of polycystic lipomembranous osteodysplasia with sclerosing leukoencephalopathy (PLOSL). Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Nov 2012]

**Clinical and Translational Updates**

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