Biotinylated Human TNFR2 / CD120b / TNFRSF1B Protein, His,Avitag™ (MALS verified)





Synonym

TNFRSF1B,CD120b,TBPII,TNF-R-II,TNF-R75,TNFBR,TNFR1B,TNFR2,TNFR80,p75,p75TNFR

Source

Biotinylated Human TNFR2, His,Avitag(TN2-H82E3) is expressed from human 293 cells (HEK293). It contains AA Leu 23 - Asp 257 (Accession # P20333-1). Predicted N-terminus: Leu 23

Molecular Characterization



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

The protein has a calculated MW of 28.7 kDa. The protein migrates as 40-55 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using AvitagTM 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.

Purity

>90% as determined by SDS-PAGE.

>95% as determined by SEC-MALS.

Formulation

Lyophilized from $0.22~\mu m$ 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

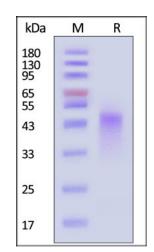
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

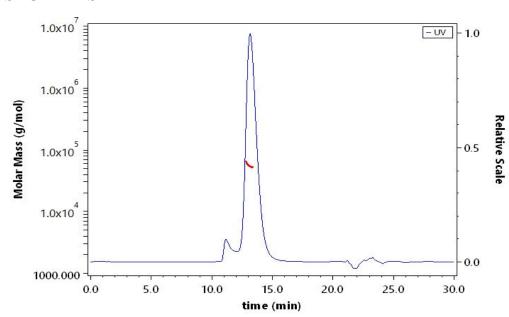
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Biotinylated Human TNFR2, 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 <u>Star Ribbon Pre-stained Protein Marker</u>).

SEC-MALS



The purity of Biotinylated Human TNFR2, His, Avitag (Cat. No. TN2-H82E3) is more than 95% and the molecular weight of this protein is around 38-53 kDa verified by SEC-MALS.

Report

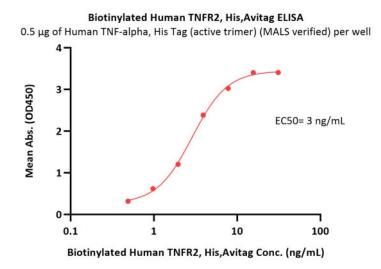
Bioactivity-ELISA



Biotinylated Human TNFR2 / CD120b / TNFRSF1B Protein, His,Avitag™ (MALS verified)

Catalog # TN2-H82E3





Immobilized Human TNF-alpha, His Tag (active trimer) (MALS verified) (Cat. No. TNA-H5228) at 5 μ g/mL (100 μ L/well) can bind Biotinylated Human TNFR2, His,Avitag (Cat. No. TN2-H82E3) with a linear range of 0.2-4 μ g/mL (QC tested).

Background

TNF RI is also known as the p60 or p55 TNFR) and TNF RII (the p75 or p80 TNFR) are two distinct type I transmembrane glycoproteins that bind TNF with highaffinity. Both RI and RII are prototypic members of the TNF receptor superfamily and have been designated TNFRSF1A and TNFRSF1B, respectively. Human TNF RII cDNA encodes a 461 amino acid (aa) residue precursor protein with a 22 aa putative signal peptide, a 235 aa extracellular domain, a 20 aa transmembrane domain and a 174 aa cytoplasmic domain. TNFRII is expressed in fetal brain. The protein is produced naturally as a soluble form (sTNFRII). The soluble receptor inhibits TNFα action by competing with cell surface receptors in binding TNFα, thereby blocking its biologic effects. TNFRII is strongly expressed at the cartilage–pannus junction, and plays a major role in a subset of families with multiple cases of rheumatoid arthritis (RA). Further, high plasma levels of sTNFRII were significantly associated with increased incidence of coronary heart disease, independent of established cardiovascular risk factors, and seems to be useful for monitoring the inflammatory activity of sarcoidosis.

