Human DR3 Protein, Fc Tag (MALS verified)

Catalog # DR3-H5253

Synonym

TNFRSF25,DR3,APO3,DDR3,TNFRSF12,WSL,WSL1

Source

Human DR3 Protein, Fc Tag(DR3-H5253) is expressed from human 293 cells (HEK293). It contains AA Gln 25 - Gln 199 (Accession # Q93038-1).

Molecular Characterization

DR3(Gln 25 - Gln 199) Q93038-1	Fc(Pro 100 - Lys 330) P01857

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

The protein has a calculated MW of 45.5 kDa. The protein migrates as 53-63 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.

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

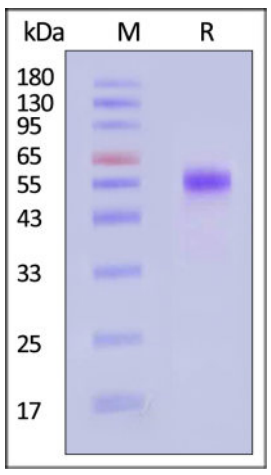
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

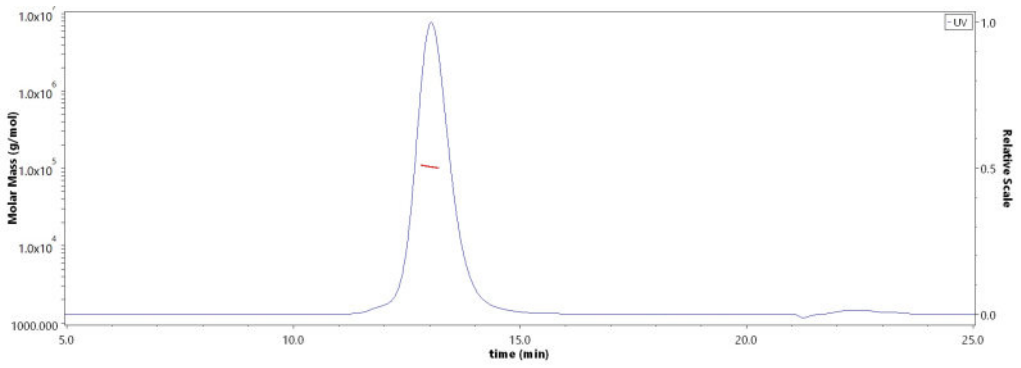
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



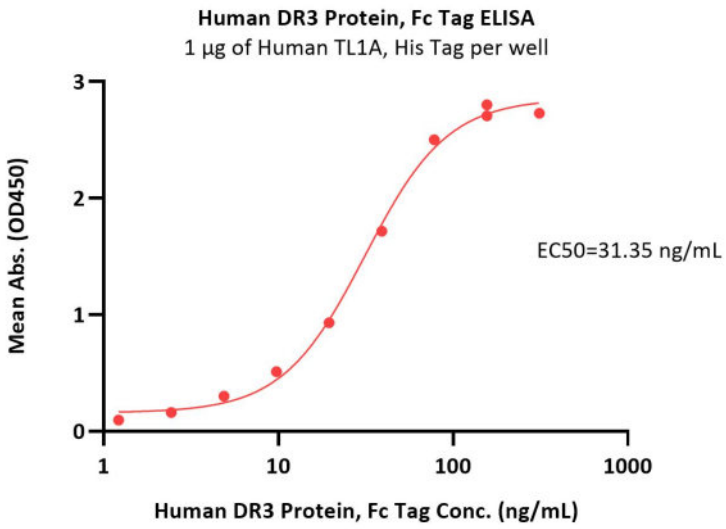
Human DR3 Protein, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS

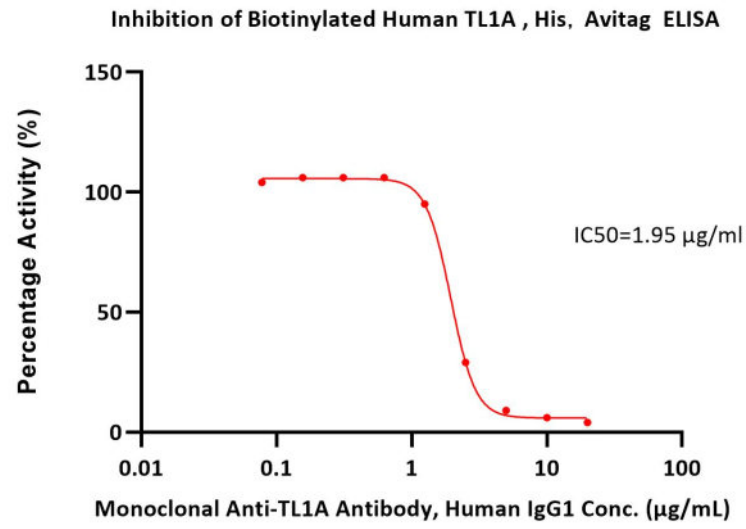


The purity of Human DR3 Protein, Fc Tag (Cat. No. DR3-H5253) is more than 90% and the molecular weight of this protein is around 95-115 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA

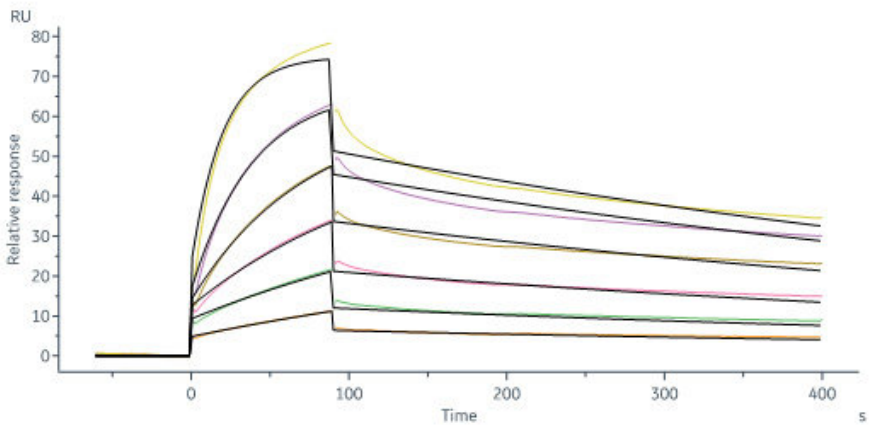


Immobilized Human TL1A, His Tag (Cat. No. TLA-H5243) at 10 μg/mL (100 μL/well) can bind Human DR3 Protein, Fc Tag (Cat. No. DR3-H5253) with a linear range of 1-78 ng/mL (QC tested).



Immobilized Human DR3, Fc Tag (Cat. No. DR3-H5253) at 5 μg/mL (100 μL/well) can bind pre-mixed increasing concentrations of Anti-TL1A Neutralizing Antibody, Human lgG1 and 1 μg/mL (50μL/well) Biotinylated Human TL1A, His Avitag (Cat.No.TLA-H52Q1) with a half maximal inhibitory concentration (lC50) of 1.95 μg/mL (Routinely tested).

Bioactivity-SPR



Human DR3 Protein, Fc Tag (Cat. No. DR3-H5253) captured on Protein A Chip can bind Human TL1A, His Tag (Cat. No. TLA-H5243) with an affinity constant of 7.58 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Background

Tumor necrosis factor receptor superfamily member 25 (TNFRSF25) is also known as Apo-3, Death receptor 3 (DDR3 or DR3), Apoptosis-inducing receptor AIR, Apoptosis-mediating receptor TRAMP, Lymphocyte-associated receptor of death, Apo-3, which is a member of the TNF-receptor superfamily. TNFRSF25 is a homodimer protein, which can Interact strongly via the death domains with TNFRSF1 and TRADD to activate at least two distinct signaling cascades, apoptosis and NF-kappa-B signaling. TNFRSF25 is receptor for TNFSF12 / APO3L / TWEAK.

Clinical and Translational Updates