

Synonym

TNFRSF10A,TRAIL-R1,CD261,APO2,DR4

Source

Human TRAIL R1, Fc Tag(TR1-H5254) is expressed from human 293 cells (HEK293). It contains AA Ala 24 - Asn 239 (Accession # [NP_003835](#)).
Predicted N-terminus: Ala 24

Molecular Characterization

DR4(Ala 24 - Asn 239) NP_003835	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 49.0 kDa. The protein migrates as 45-50 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per µg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 100 mM Glycine, 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

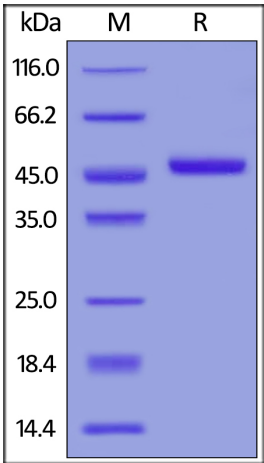
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

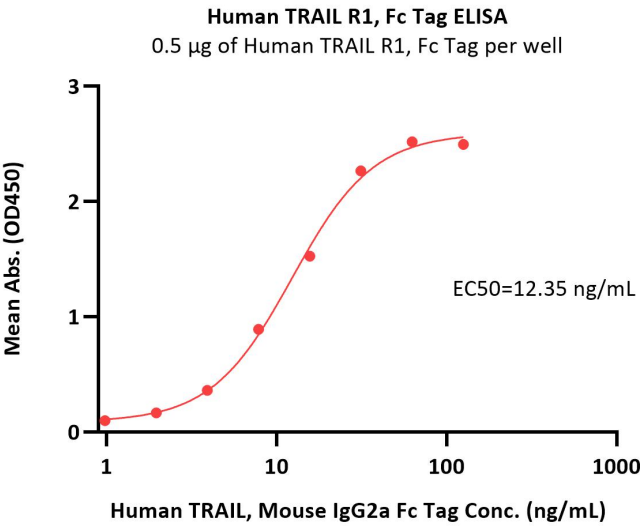
SDS-PAGE



Human TRAIL R1, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

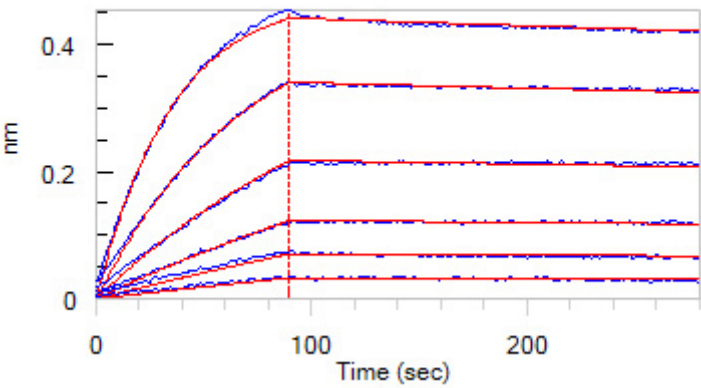
Bioactivity-ELISA



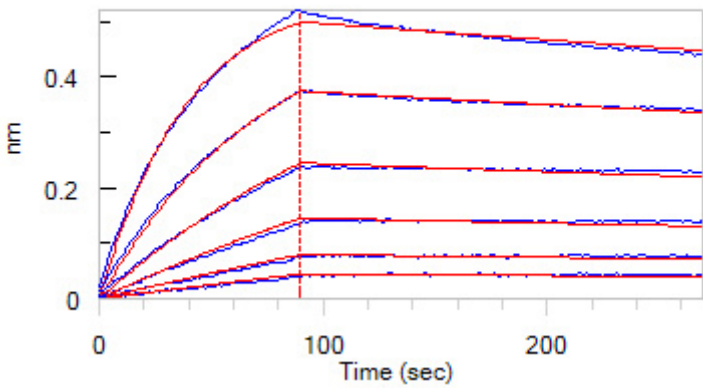


Immobilized Human TRAIL R1, Fc Tag (Cat. No. TR1-H5254) at 5 µg/mL (100 µL/well) can bind Human TRAIL, Mouse IgG2a Fc Tag with a linear range of 4-16 ng/mL (QC tested).

Bioactivity-BLI



Loaded Human TRAIL R1, Fc Tag (Cat. No. TR1-H5254) on AHC Biosensor, can bind Human TRAIL, His Tag with an affinity constant of 0.891 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



Loaded Human TRAIL, His Tag on HIS1K Biosensor, can bind Human TRAIL R1, Fc Tag (Cat. No. TR1-H5254) with an affinity constant of 2.4 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

Tumor necrosis factor receptor superfamily member 10A (TNFRSF10A) is also known as TNF-related apoptosis-inducing ligand receptor 1 (TRAIL-R1), Death receptor 4 (DR4), CD261 and APO2, which belongs to TNF superfamily. TRAILR1 / TNFRSF10A contains 1 death domain and 3 TNFR-Cys repeats. TNFRSF10A / DR4 is widely expressed and high levels are found in spleen, peripheral blood leukocytes, small intestine and thymus, but also in K-562 erythroleukemia cells, MCF-7 breast carcinoma cells and activated T-cells. APO2 / TNFRSF10A is receptor for the cytotoxic ligand TNFSF10 / TRAIL. The adapter molecule FADD recruits caspase-8 to the activated receptor. The resulting death-inducing signaling complex (DISC) performs caspase-8 proteolytic activation which initiates the subsequent cascade of caspases (aspartate-specific cysteine proteases) mediating apoptosis. TRAILR-1 / DR4 / CD261 promotes the activation of NF-kappa-B.

