Human TRAIL R2 / DR5 / TNFRSF10B Protein, Fc Tag

Catalog # TR2-H5255

Synonym

TNFRSF10B,TRAILR2,TRAIL-R2,CD262,DR5,KILLER,TRICK2,ZTNFR9,TRICKB

Source

Human TRAIL R2, Fc Tag(TR2-H5255) is expressed from human 293 cells (HEK293). It contains AA Ile 56 - Glu 182 (Accession # NP_003833).
Predicted N-terminus: Ile 56

Molecular Characterization

DR5(Ile 56 - Glu 182) NP_003833	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 40.4 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.

Purity

>95% as determined by SDS-PAGE.

Formulation

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

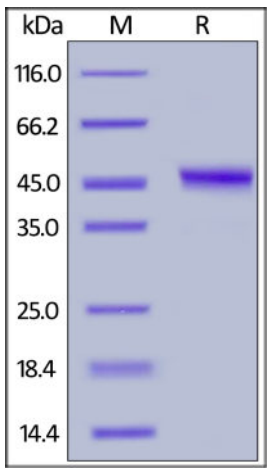
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

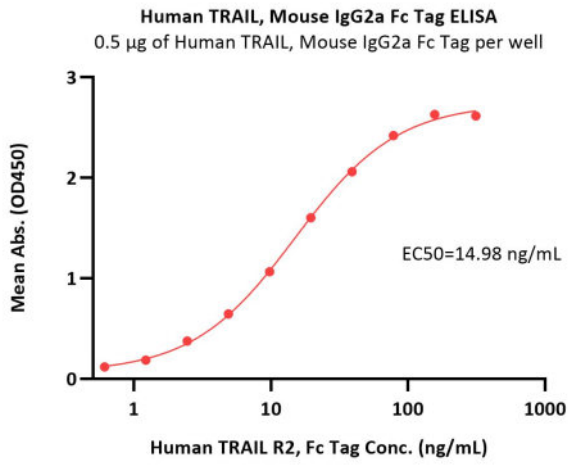
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



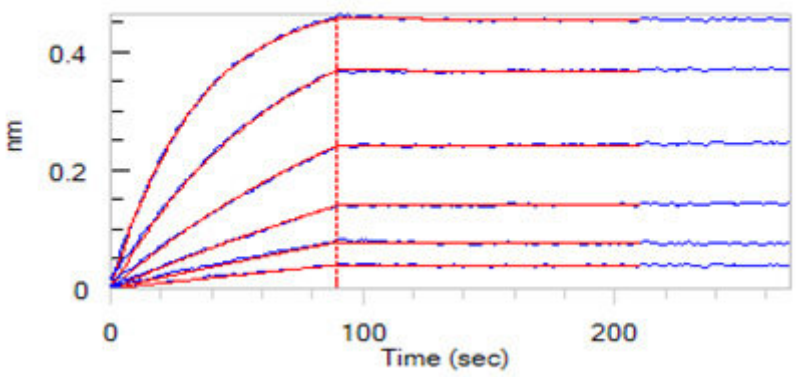
Human TRAIL R2, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-ELISA



Immobilized Human TRAIL, Mouse IgG2a Fc Tag (Cat. No. TRL-H5259) at 5 μg/mL (100 μL/well) can bind Human TRAIL R2, Fc Tag (Cat. No. TR2-H5255) with a linear range of 0.6-20 ng/mL (QC tested).

Bioactivity-BLI



Loaded Human TRAIL R2, Fc Tag (Cat. No. TR2-H5255) on AHC Biosensor, can bind Human TRAIL, His Tag with an affinity constant of 0.146 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Background

Tumor necrosis factor receptor superfamily member 10B (TNFRSF10B) is also known as TNF-related apoptosis-inducing ligand receptor 2 (TRAILR2), Death receptor 5 (DR5), CD262, KILLER, is a member of the TNF-receptor superfamily, and contains an intracellular death domain. TNFRSF10B / DR-5 is widely expressed in adult and fetal tissues; very highly expressed in tumor cell lines. TRAILR2 / CD262 / DR5 is the receptor for the cytotoxic ligand TNFSF10/TRAIL. The adapter molecule FADD (a death domain containing adaptor protein) of TRAIL-R2 / TNFRSF10B 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. CD262 / DR5 Promotes the activation of NF-kappa-B. DR5 is essential for ER stress-induced apoptosis and is regulated by p53/TP53.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.