

Recombinant Human TRAILR1/TNFRSF10A Protein (His Tag)

Catalog No. PKSH031625

Note: Centrifuge before opening to ensure complete recovery of vial contents.

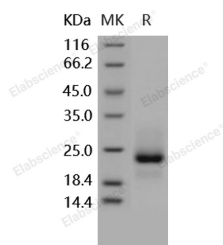
Description

Synonyms	APO2;CD261;DR4;MGC9365;TNFRSF10A;TRAILR-1;TRAILR1
Species	Human
Expression Host	HEK293 Cells
Sequence	Met 1-Asn 239
Accession	NP_003835.2
Calculated Molecular Weight	15.7 kDa
Observed molecular weight	24 kDa
Tag	C-His
Bioactivity	Measured by its ability to inhibit TRAIL-mediated cytotoxicity using L-929 mouse fibroblast cells treated with TRAIL. The ED50 for this effect is typically 50-200 ng/ml in the presence of 20 ng/ml Recombinant Human TRAIL/TNFSF10.

Properties

Purity	> 92 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 92 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

Tumor necrosis factor receptor superfamily, member 10a (TRAIL R1), also known as TRAIL receptor 1 (TRAIL R1) or CD261 antigen, is a member of the TNF-receptor superfamily. This receptor is activated by tumor necrosis factor-related apoptosis inducing ligand (TNFSF10/TRAIL), and thus transduces cell death signal and induces cell apoptosis. Studies with FADD-deficient mice suggested that FADD, a death domain containing adaptor protein, is required for the apoptosis mediated by this protein. TRAIL R1/CD261/TNFRSF10A serves as a 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. TRAIL R1 can promote the activation of NF-kappa-B. TRAIL R1/CD261/TNFRSF10A induces apoptosis of many transformed cell lines but not of normal tissues, even though its death domain-containing receptor, DR4, is expressed on both cell types.