



Recombinant Protein Technical Manual

Recombinant Human TRAIL R2/TNFRSF10B Protein (His & Fc Tag)(Active) RPES4133

Product Data:

Product SKU: RPES4133

Size: 100µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_003833.3

Protein Information:

Molecular Mass: 42.4 kDa

AP Molecular Mass: 50 kDa

Tag: C-His & Fc

Bio-activity: 1. Measured by its binding ability in a functional ELISA. Immobilized human TNFSF10 at 10 µg/ml (100 µl/well) can bind human TNFRSF10B Fc chimera with a linear range of 2.5-40 ng/ml. 2. 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 2525 ng/mL in the presence of 10 ng/mL Recombinant Human TRAIL/TNFSF10.

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: 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

Reconstitution: Please refer to the printed manual for detailed information.

Application: Functional ELISA

Synonyms: Tumor Necrosis Factor Receptor Superfamily Member 10B; Death Receptor 5; TNF-Related Apoptosis-Inducing Ligand Receptor 2; TRAIL Receptor 2; TRAIL-R2; CD262; TNFRSF10B; DR5; KILLER; TRAILR2; TRICK2; ZTNFR9

Immunogen Information:

Sequence: Met 1-Glu 182

Background:

Tumor necrosis factor receptor superfamily, member 10b, official symbol TNFRSF10B, also known as Death receptor 5, CD262, TNF-related apoptosis-inducing ligand receptor 2 (TRAIL R2), is a member of the TNF-receptor superfamily, and contains an intracellular death domain. This receptor can be activated by tumor necrosis factor-related apoptosis inducing ligand (TNFSF10/TRAIL/APO-2L), and transduces an apoptosis signal. Studies with FADD-deficient mice suggested that FADD, a death domain containing adaptor protein, is required for the apoptosis mediated by this protein. TRAIL R2/CD262/TNFRSF10B was purified independently as the only receptor for TRAIL detectable on the surface of two different human cell lines that undergo apoptosis upon stimulation with TRAIL. TRAIL R2/CD262/TNFRSF10B contains two extracellular cysteine-rich repeats, typical for TNF receptor (TNFR) family members, and a cytoplasmic death domain. TRAIL R2/CD262/TNFRSF10B mediates apoptosis via the intracellular adaptor molecule FADD/MORT1. TRAIL receptors can signal both death and gene transcription, functions reminiscent of those of TNFR1 and TRAMP, two other members of the death receptor family. Defects in TRAIL R2/CD262/TNFRSF10B may be a cause of head and neck squamous cell carcinomas (HNSCC) also known as squamous cell carcinoma of the head and neck.