

## Recombinant Protein Technical Manual

# Recombinant Mouse TRAIL R2/TNFRSF10B Protein (His Tag)(Active)

RPES2371

**Product SKU: RPES2371 Size:** 100µg

Species: Mouse **Expression host:** HEK293 Cells

**Uniprot:** NP 064671.2

**Molecular Mass:** 15 kDa

AP Molecular Mass: 25-35 kDa

Tag: C-His

**Bio-activity:** 1. Immobilized mouse TNFRSF10B-His at 10 μg/ml (100 μl/well) can bind

> biotinylated human TNFSF10, The EC50 of biotinylated human TNFSF10 is 0.16-0.38 μg/ml.2. Measured by its ability to inhibit TRAIL-mediated cytotoxicity using

L-929 mouse fibroblast cel

**Purity:** > 95 % as determined by SDS-PAGE

**Endotoxin:** < 1.0 EU per µg of the protein 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.

**Functional ELISA Application:** 

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-Ser 177

### **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.