

# Recombinant Protein Technical Manual

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

RPES0499

Product Data:

Product SKU: RPES0499 Size: 10μg

Species: Mouse Expression host: Human Cells

Uniprot: Q9QZM4

#### **Protein Information:**

Molecular Mass: 40.9 kDa

AP Molecular Mass: 50-75 kDa

**Tag:** C-Fc

**Bio-activity:** Measured by its ability to inhibit TRAIL-mediated cytotoxicity using L-929 mouse

fibroblast cells treated with TRAIL. The ED50 for this effect is 92.04 ng/ml in the

presence of 40 ng/mL of TNFSF10.

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

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

**Storage:** Lyophilized protein should be stored at < -20°C, though stable at room

temperature for 3 weeks. Reconstituted protein solution can be stored at  $4-7^{\circ}$ 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 a 0.2 μm filtered solution of 20mM PB,150mM NaCl,pH7.4.

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

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: Asn53-Ser177

### **Background:**

Mouse tumor necrosis factor receptor superfamily member 10B (TNFRSF10B) is a member of the TNFR family which contains 1 death domain and 3 TNFR-Cys repeats. TNFRSF10B exhibits high structural and functional homology to TRAIL-R1 (DR-4). TNFRSF10B is highly expressed in heart, lung, lymphocytes, spleen and kidney. In addition, it is regulated by the tumor suppressor p53. TNFRSF10B is the receptor for the cytotoxic ligand TNFSF10/TRAIL. It promotes the activation of NF-kappa-B and is essential for ER stress-induced apoptosis. 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 mediating apoptosis.