



# Recombinant Protein Technical Manual

## Recombinant Human TRAIL R4/TNFRSF10D Protein (His & Fc Tag)(Active) RPES3415

### Product Data:

**Product SKU:** RPES3415

**Size:** 100µg

**Species:** Human

**Expression host:** HEK293 Cells

**Uniprot:** NP\_003831.2

### Protein Information:

**Molecular Mass:** 44.7 kDa

**AP Molecular Mass:** 65-80 kDa

**Tag:** C-His & Fc

**Bio-activity:** 1. Measured by its binding ability in a functional ELISA. Immobilized human TNFRSF10D Fc Chimera at 10 µg/ml (100 µl/well) can bind biotinylated TNFSF10 with a linear range of 0.625-20 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 0.2 µg/ml in the presence of 20 ng/ml Recombinant Human TRAIL/TNFSF10.

**Purity:** > 98 % 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 10D; Decoy receptor 2; DcR2; TNF-related apoptosis-inducing ligand receptor 4; TRAIL receptor 4; TRAIL-R4;

TRAIL receptor with a truncated death domain; CD264; TNFRSF10D; DCR2;  
TRAILR4; TRUNDD

## Immunogen Information:

**Sequence:** Met 1-His 211

## Background:

Tumor necrosis factor receptor superfamily member 10D (TNFRSF10D), also known as TNF-related apoptosis-inducing ligand receptor 4 (TRAIL R4), CD264, and Decoy receptor 2, is a member of the TNF-receptor superfamily. This receptor contains an extracellular TRAIL-binding domain, a transmembrane domain, and a truncated cytoplasmic death domain. This receptor does not induce apoptosis, and has been shown to play an inhibitory role in TRAIL-induced cell apoptosis. TRAIL R4/CD264/TNFRSF10D is widely expressed, in particular in fetal kidney, lung and liver, and in adult testis and liver. TRAIL R4/CD264/TNFRSF10D is also expressed in peripheral blood leukocytes, colon and small intestine, ovary, prostate, thymus, spleen, pancreas, kidney, lung, placenta and heart. The signaling capacity of TRAIL R4 is similar to that of TRAIL R1 and TRAIL R2 with respect to NF- $\kappa$ B activation, but differs in its inability to induce apoptosis. TRAIL R4 retains a C-terminal element containing one third of a consensus death domain motif. Transient overexpression of TRAIL R4 in cells normally sensitive to TRAIL-mediated killing confers complete protection, suggesting that one function of TRAIL R4 may be inhibition of TRAIL cytotoxicity.