Mouse TRAIL R2 / CD262 / TNFRSF10B Protein (His & Fc Tag)

Catalog Number: **50412-M03H**

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Biological Solution Specialist

General Information

Gene Name Synonym:

CD262; DR5; KILLER; KILLER/DR5; TRAIL-R2; TRAILR2; TRICK2; TRICK2A; TRICK2B; TRICKB; ZTNFR9; DR5; KILLER; Ly98; MK; TRAILR2; TRICK2A; TRICK2B; TRICKB

Protein Construction:

A DNA sequence encoding the extracellular domain of mouse TNFRSF10B (NP_064671.2) (Met 1-Ser 177) was fused with the C-terminal polyhistidine-tagged Fc region of human IgG1 at the C-terminus.

Source: Mouse

Expression Host: Human Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Bio Activity:

1. Immobilized human TNFSF10 (Cat:10409-HNAE) at 10 μg/ml (100 μl/well) can bind mouse TNFRSF10B-Fch, The EC_{50} of mouse TNFRSF10B-Fch is 0.07-0.17 μg/ml. 2. Measured by its ability to inhibit TRAIL-mediated cytotoxicity using L?929 mouse fibroblast cells treated with TRAIL. The ED_{50} for this effect is typically 20-80 ng/ml in the presence of 20 ng/ml Recombinant Human TRAIL/TNFSF10.

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 ℃

Predicted N terminal: Asn 53

Molecular Mass:

The recombinant mouse TNFRSF10B/Fc chimera is a disulfide-linked homodimer. The reduced monomer consists of 373 amino acids and has a calculated molecular mass of 41.8 kDa. As a result of glycosylation, the apparent molecular mass of the TNFRSF10B/Fc monomer is approximately 50-55 kDa in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

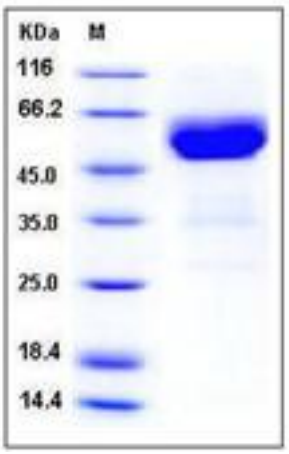
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

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.

References

1.Schneider P, *et al.* (1997) TRAIL receptors 1 (DR4) and 2 (DR5) signal FADD-dependent apoptosis and activate NF-kappaB. Immunity. 7(6): 831-6.
2.Ichikawa K, *et al.* (2003) TRAIL-R2 (DR5) mediates apoptosis of synovial fibroblasts in rheumatoid arthritis. J Immunol. 171(2): 1061-9.
3.Walczak H, *et al.* (1997) TRAIL-R2: a novel apoptosis-mediating receptor for TRAIL. EMBO J. 16(17): 5386-97.