Human TRAIL R2 / CD262 / TNFRSF10B Protein (His Tag)

Catalog Number: 10465-H08H



General Information

Gene Name Synonym:

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

Protein Construction:

A DNA sequence encoding the human TNFRSF10B (NP_003833.4) extracellular domain (Met1-Glu182) was expressed with a polyhistidine tag at the C-terminus.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Bio Activity:

Measured by its binding ability in a functional ELISA. Immobilized human TNFRSF10B at 10 μ g/ml (100 μ l/well) can bind biotinylated TNFSF10 with a linear range of 0.625-20 μ g/ml.

Endotoxin:

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

Predicted N terminal: lle 56

Molecular Mass:

The recombinant human TNFRSF10B consists of 138 amino acids and has a predicted molecular mass of 15.7 kDa. As a result of glycosylation, the apparent molecular mass of rhTNFRSF10B is approxiamtely 20-22 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

Stability & Storage:

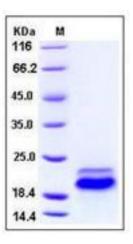
Store it under sterile conditions at $-20\,^\circ\mathbb{C}$ to $-80\,^\circ\mathbb{C}$ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

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 1b, official symbol TNFRSF1B, 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 (TNFSF1/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/TNFRSF1B 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/TNFRSF1B contains two extracellular cysteine-rich repeats, typical for TNF receptor (TNFR) family members, and a cytoplasmic death domain. TRAIL R2/CD262/TNFRSF1B 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/TNFRSF1B 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.