

Tumor Necrosis Factor Receptor Type 2, His Tag, human recombinant (rHuTNFR2-His)

Catalog No: 97288
Lot No: XXXXX
Source: E. coli

Synonyms: Tumor necrosis factor receptor superfamily member 1B, Tumor necrosis factor receptor 2, Tumor necrosis

factor receptor type II, p75, p80 TNF-alpha receptor, CD120b, Etanercept, TNF-R2, TNF-RII, TNFR-II,

TNFRSF1B, TNFBR, TNFR2, TBPII, TNFR2, TNFR1B, TNFR80, TNF-R75, p75TNFR, TNF-R-II

Background

TNFR2 belongs to the TNF-receptor superfamily. TNFR2 is receptor with high affinity for TNFSF2/TNF-alpha and approximately 5-fold lower affinity for homotrimeric TNFSF1/lymphotoxin-alpha. TNFR2 mediates the majority of the metabolic effects of TNF-alpha. In addition, knockout studies in mice propose a role for TNFR2 in protecting neurons from apoptosis by stimulating antioxidative pathways. TNFR2 expression might have a significant role in the angiogenesis, tumor cell proliferation and metastasis of Invasive micropapillary carcinoma of the breast. There are 2 types of soluble TNF receptors: sTNFR-I and sTNFR-II, which act to neutralize the biological activities of TNF alpha and TNF beta. The levels of these soluble receptors seem to increase as a result of shedding of the extracellular domains of the membrane bound receptors. High levels of soluble TNF receptors are found in the amniotic fluid of pregnant women. TNFR2 and TNFR1 form a heterocomplex which mediates the recruitment of 2 anti-apoptotic proteins, c-IAP1 and c-IAP2, which possess E3 ubiquitin ligase activity. IAPs' function in TNF-receptor signaling is unknown; nevertheless, c-IAP1 is believed to potentiate TNF-induced apoptosis by the ubiquitination and degradation of TNF-receptor-associated factor 2, which mediates anti-apoptotic signals. Oxidative stress promotes TNFR1 and TNFR2 self-interaction, ligand-independent and enhanced ligand-dependent TNF signaling. TNF-a, TNFR1 and TNFR2 have roles in cellular differentiation. TNFR1 and TNFR2 function in cell type-specific renal injury.

Description

Tumor Necrosis Factor Receptor 2 human recombinant produced in *E. coli* is a single, non-glycosylated, polypeptide chain containing 184 amino acids (23-206) having a molecular weight of 24.45 kDa. TNFR2 is fused with a 4.5 kDa N-terminal hexahistidine tag and purified by proprietary chromatographic techniques.

Physical Appearance

Sterile filtered clear solution (0.3 mg/ml).

Formulation

The TNFR2 protein is supplied in 20 mM Tris HCl pH 8, 5 mM EDTA and 50% glycerol.

Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store frozen at -20°C for longer periods of time. Please avoid freeze thaw cycles.

Purity

Greater than 95.0% as determined by SDS-PAGE.

Amino Acid Sequence

LPAQVAFTPY APEPGSTCRL REYYDQTAQM CCSKCSPGQH AKVFCTKTSD TVCDSCEDST YTQLWNWVPE CLSCGSRCSS DQVETQACTR EQNRICTCRP GWYCALSKQE GCRLCAPLRK CRPGFGVARP GTETSDVVCK PCAPGTFSNT TSSTDICRPH QICNVVAIPG NASMDAVCTS TSPT





Usage

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