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TNFR2 Human

Tumor Necrosis Factor Receptor Type 2 Human Recombinant
CYK0571

Product Overview

Name	TNFR2 Human

Description

Tumor Necrosis Factor Receptor Type 2 Human Recombinant

Accession (Primary)	P20333

Synonyms

Tumor necrosis factor receptor superfamily member 1B, Tumor necrosis factor receptor 2, TNF-R2, Tumor necrosis factor receptor type II, TNF-RII, TNFR-II, p75, p80 TNF-alpha receptor, TNFRSF1B, TNFBR, TNFR2.

Introduction

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.

Source

Escherichia Coli.

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Formulation

TNFR2 was Lyophilized from a 0.2 μm filtered concentrated solution in PBS, pH7.4.

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Stability

Lyophilized TNFR2 although stable at room temperature for 3 weeks, should be stored desiccated below -18C. Upon reconstitution TNFR2 should be stored at 4C between 2-7 days and for future use below -18C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

Purity

Greater than 97.0% as determined by SDS-PAGE.

Amino acid sequence

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

Biological Activity

The ED50 as determined by its ability to inhibit the TNF-a mediated cytotoxicity in the L-929 cells is less than 0.2 µg/ml, corresponding to a specific activity of > 5000IU/mg in the presence of 0.25ng/mL of rHuTNF-a.

Solubility

It is recommended to reconstitute the lyophilized TNFR2 in sterile 18M-cm H 2 O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Precautions

TNFR2 Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P20333)