9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

TNFR Mouse

Tumor Necrosis Factor Receptor Mouse Recombinant
CYK0570

Product Overview

Name	TNFR Mouse
Description	
Tumor Necrosis Factor Receptor Mouse Recombinant	
Accession (Primary)	P25118
Synonyms	
Tumor necrosis factor receptor superfamily member 1A, Tumor necrosis factor receptor 1, TNF-R1, Tumor necrosis factor receptor type I, TNF-RI, TNFR-I, p55, p60, CD120a, Tnfrsf1a, Tnfr-1, Tnfr1, FPF, TNF-R, TNFAR, TNFRI, p55-R, TNFR60, Tnfr-2, TNF-R-I, TNF-R55, TNFRp55, TNF-alphaR1, TNFalpha-R1.	
Introduction	
TNFR1 belongs to the TNF-receptor superfamily. TNFR1 is a receptor for TNFSF2/TNF-alpha and homotrimeric TNFSF1/lymphotoxin-alpha. 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. TNF-a, TNFR1 and TNFR2 have roles in cellular differentiation. TNFR1 and TNFR2 function in cell type-specific renal injury. TNFR1 is capable of signaling both cell survival and apoptosis. TNFR1-induced apoptosis requires 2 sequential signaling complexes. TNFR1 is capable of activating NF-kappaB, mediate apoptosis, and function as a regulator of inflammation. Oxidative stress promotes TNFR1 and TNFR2 self-interaction, ligand-independent and enhanced ligand-dependent TNF signaling. TNFR1 contributes to the induction of non-cytocidal TNF effects including anti-viral state and activation of the acid sphingomyelinase. Human TNFR1 has a major region which controls cell surface expression. High levels of soluble TNF receptors are found in the amniotic fluid of pregnant women. Germline mutations of the extracellular domains of TNFR1 are linked to the autosomal dominant periodic fever syndrome. The impaired receptor clearance is believed to be a mechanism of the disease. Familial hibernian fever (FHF) is caused by defects in TNFRSF1A gene.	
Source	
Escherichia Coli.	
Physical Appearance	
Sterile Filtered White lyophilized (freeze-dried) powder.	
Formulation	
TNFR protein was lyophilized from a 0.2 μm filtered concentrated solution in PBS, pH 7.4.	

9051 Mira Mesa Blvd, #910094
San Diego, CA 92191
Tel: 760-390-3989

Stability

Lyophilized TNFR although stable at room temperature for 3 weeks, should be stored desiccated below -18C. Upon reconstitution TNFR 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

IHPSGVTGLV PSLGDREKRD SLCPQGKYVH SKNNSICCTK CHKGTYLVSD CPSPGRDTVC RECEKGTFTA SQNYLRQCLS CKTCRKEMSQ VEISPCQADK DTVCGCKENQ FQRYLSETHF QCVDCSPCFN GTVTIPCKET QNTVCNCHAG FFLRESECVP CSHCKKNEEC MKLCLPPPLA NVTNPQDSGT A.

Biological Activity

The ED 50 as determined by its ability to inhibit the TNF-α mediated cytotoxicity in the L-929 cells is less than 1.0 µg/ml, corresponding to a specific activity of > 1000 IU/mg in the presence of 0.1 ng/mL of rMuTNF-a.

Solubility

It is recommended to reconstitute the lyophilized TNFR in sterile 18M-cm H2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Precautions

TNFR Mouse is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P25118)