



RayBiotech, Inc.

3607 Parkway Lane suite 200
Norcross, GA 30092
Tel: 770-729-2992, 1-888-494-8555
Fax: 770-206-2393
Website: www.raybiotech.com
Email: info@raybiotech.com

Certificate of Analysis and Data Sheet

Recombinant Human Tumor Necrosis Factor Receptor Type 1

Catalog No.
228-11527

Source
Escherichia Coli

Synonyms:

Tumor necrosis factor receptor superfamily member 1A, Tumor necrosis factor receptor 1, Tumor necrosis factor receptor type I, TNF-R1, TNF-RI, TNFR-I, p60, p55, CD120a, TNFRSF1A, TNFAR, TNFR1, FPF, TBP1, TNF-R, p55-R, TNFR55, TNFR60, TNF-R-I, TNF-R55, MGC19588.

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.

Description:

TNFR1 Human Recombinant produced in E.Coli is a single, non-glycosylated, Polypeptide chain containing 161 amino acids fragment (41-201) having a molecular weight of 22.68kDa and fused with a 4.5kDa amino-terminal hexahistidine tag. The TNFR1, His Tag is purified by proprietary chromatographic techniques.

**The products are furnished for LABORATORY RESEARCH USE ONLY.
Not for diagnostic or therapeutic use.**



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Physical Appearance:

Sterile Filtered clear solution.

Formulation:

TNFR1 His Tag protein is supplied in 1xPBS, 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% as determined by SDS-PAGE.

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