# Product Data Sheet

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| Product Name: | TNFR (22-211) Human |
| Cat. No.: | GP20985 |
| Batch No.: | 1 |

## Product Data

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| Purity | >98% | Source | Escherichia Coli. |
| Phycical Appearance | solid | Shipping Condition | Shipped with Ice Packs. |
| Synonyms | CD120a; FPF; MS5; p55; p55-R; p60; TBP1; TNF-R; TNF-R-I;TNF-R55; TNFAR; TNFR1; TNFR1-d2;TNFR55; TNFR60; Tumor necrosis factor receptorsuperfamily member 1A; Tumor necrosis factorreceptor superfamily member 1A. | | |
| Amino Acid Sequence | MGSSHHHHHH SSGLVPRGSH MGSIYPSGVI GLVPHLGDRE KRDSVCPQGK YIHPQNNSIC CTKCHKGTYLYNDCPGPGQD TDCRECESGS FTASENHLRH CLSCSKCRKE MGQVEISSCT VDRDTVCGCR KNQYRHYWSENLFQCFNCSL CLNGTVHLSC QEKQNTVCTC HAGFFLRENE CVSCSNCKKS LECTKLCLPQ IENVKGTEDSGTT. | | |
| Formulation | TNFR protein solution (1mg/ml) containing 20mM Tirs-HCl (pH8.0) and 10% glycerol. | | |

## 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


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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.

## Stability

Store at 4°C if entire vial will be used within 2-4 weeks.

## Background

TNFR Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 213 amino acids (22-211 a.a) and having a molecular mass of 23.6kDa.TNFR is fused to a 23 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.