

---

**Product Data Sheet**


---

Product Name: TNFR2 Human, Sf9  
 Cat. No.: GP20989  
 Batch No.: 1

**Product Data**

Purity	>98%	Source	Sf9, Baculovirus cells.
Physical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
Synonyms	Tumor Necrosis Factor Receptor Superfamily; Member 1B; TNFR2; TNFBR; Tumor Necrosis Factor Receptor Type II; Tumor Necrosis Factor Receptor 2; P80 TNF-Alpha Receptor; TNF-RII; TNF-R2; P75; Tumor Necrosis Factor Receptor Superfamily Member 1B; Tumor Necrosis Factor Binding Protein 2; Tumor Necrosis Factor Beta Receptor; Soluble TNFR1B Variant 1; P75 TNF Receptor; CD120b Antigen; Etanercept; TNF-R-II; TNF-R75; P75TNFR; TNFR-II; CD120b; TNFR1B; TNFR80; TBPII.		
Amino Acid Sequence	LPAQVAFTPY APEPGSTCRL REYYDQTAQM CCSKCSPGQH AKVFCTKTS TVCDSCEDST YTQLWNWVPE CLSCGSRCS DQVETQACTR EQNRICRCP GWYCALSKQE GCRLCAPLRK CRPGFGVARP GTETSDVVCK PCAPGTFSNT TSSTDICRPH QICNVVAIPG NASMDAVCTS TSPTRSMAPG AVHLPQPVST RSQHTQPTPE PSTAPSTSFL LPMGPPPAE GSTGDHHHHH H		
Formulation	TNFR2 protein solution (1mg/ml) contains Phosphate buffered saline (pH7.4) and 10% glycerol.		

**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

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

---

## Product Data Sheet

---

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- $\alpha$ , TNFR1 and TNFR2 have roles in cellular differentiation. TNFR1 and TNFR2 function in cell type-specific renal injury.

### 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. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

### Background

TNFR2 produced in Sf9 Baculovirus cells is a single, glycosylated polypeptide chain (23-257 a.a.) and fused to a 6 aa His Tag at C-terminus containing a total of 241 amino acids and having a molecular mass of 25.9kDa. TNFR2 shows multiple bands between 28-40kDa on SDS-PAGE, reducing conditions and purified by proprietary chromatographic techniques.

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA