

TNF-RII, human recombinant protein

Tumor necrosis factor receptor superfamily member 1B, Tumor necrosis factor receptor 2, TNF-R2, Tumo
Catalog # PBV10267r

Specification**TNF-RII, human recombinant protein - Product info**

Primary Accession [P20333](#)
Calculated MW **20.0 kDa KDa**

TNF-RII, human recombinant protein - Additional Info

Gene ID **7133**
Gene Symbol **TNFRII**

Other Names

Tumor necrosis factor receptor superfamily member 1B, Tumor necrosis factor receptor 2, Tumor necrosis factor receptor type II, p75, p80 TNF- α receptor, CD120b, Etanercept, TNF-R2, TNF-RII, TNFR-II, TNFRSF1B, TNFBR, TNFR2, TBPII, TNFR2, TNFR1B, TNFR80, TNF-R75, p75TNFR, TNF-R-II.

Gene Source	Human
Source	E. coli
Assay&Purity	SDS-PAGE; $\geq 97\%$
Assay2&Purity2	HPLC;
Recombinant	Yes
Results	The ED50 as determined by its ability to inhibit the TNF-a mediated cytotoxicity in the L-929 cells is less than 0.2 $\mu\text{g/ml}$, corresponding to a specific activity of > 5000 IU/mg in the presence of 0.25 ng/mL of rHuTNF-a.
Sequence	MPAQVAFTPY APEPGSTCRL REYYDQTAQM CCSKCSPGQH AKVFCTKTS TVCDSCEDST YTQLWNWVPE CLSCGSRCSS DQVETQACTR EQNRICTRP GWYCALSQKE GCRLCAPLRK CRPGFGVARP GTETSDVVCK PCAPGTFSNT TSSTDICRPH QICNVVAIPG NASMDAVCTS TSPT.

Target/Specificity

TNF-RII

Application Notes

It is recommended to reconstitute the lyophilized TNFR2 in sterile 18M-cm H₂O not less than 100 $\mu\text{g/ml}$, which can then be further diluted to other aqueous solutions.

Format

Lyophilized protein

Storage

-20°C; TNFR2 was Lyophilized from a 0.2 μm filtered concentrated solution in PBS, pH 7.4.

TNF-RII, human recombinant protein - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

TNF-RII, human recombinant protein - Images

TNF-RII, human recombinant protein - Background

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.

TNF-RII, human recombinant protein - References

Kohno T., et al. Proc. Natl. Acad. Sci. U.S.A. 87:8331-8335(1990).
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Lainez B., et al. Int. Immunol. 16:169-177(2004).
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