

sTNF Receptor Type I Human E. coli

Product Data Sheet

Type: Recombinant	Cat. No.:	
Source: E. coli	RBG10327005	(5 µg)
Species: Human	RBG10327020	(20 µg)
Other names: Soluble Tumor Necrosis Factor type I, TNFRSF1A, TNFAR, TNF-R55, TNFR60, p55, CD120a	RBG10327100	(100 µg)

Description

TNFR1 belongs to the TNFR superfamily of transmembrane proteins, and is expressed in most cell types. Binding of either TNF-alpha or TNF-beta to TNFR1 initiates a signal transduction pathway that results in the activation of the transduction factor NF- κ B, whose target genes are involved in the regulation of inflammatory responses, and, in certain cells induce apoptosis. Soluble TNF Receptor I (sTNFR1) is capable of inhibiting TNF-alpha and TNF-beta activities by acting as a decoy receptor that serves as a sink for the TNF ligands. The human TNFR1 gene encodes for a 455 amino acid type I transmembrane protein, which contains a 21 amino acid signal sequence, a 190 amino acid extracellular domain, a 23 amino acid transmembrane domain, and a 221 amino acid cytoplasmic domain. Recombinant Human sTNF Receptor Type I is an 18.3 kDa protein (162 amino acid residues) comprising the cysteine-rich, ligand-binding portion of the extracellular domain of the TNFR1 protein.

Research topic

Immune Response, Infection and Inflammation, Neural tissue markers

Amino Acid Sequence

MDSVCPQGKY IHPQNSICC TKCHKGTLYL NDCPGPGQDT DCRECESGSF TASENHLRHC LSCSKCRKEM GQVEISSCTV
DRDTCVCGCRK NQYRHYWSEN LFQCFNCSLC LNGTVHLSCQ EKQNTVCTCH AGFFLRENEC VSCSNCKKSL ECTKLCLPQI EN

Source

E. coli

Purity

98%

Biological Activity

Determined by its inhibitory effect of the TNF-alpha mediated cytotoxicity in murine L-929 cells. The ED₅₀ for this effect in the presence of 0.25 ng/ml of recombinant human TNF-alpha is 0.05 µg/ml.

Endotoxin

Endotoxin level is <0.1 ng/µg of protein (<1EU/µg).

Reconstitution

Centrifuge the vial prior to opening. Reconstitute in water to a concentration of 0.1-1.0 mg/ml. Do not vortex. For extended storage, it is recommended to further dilute in a buffer containing a carrier protein (example 0.1% BSA) and store in working aliquots at -20°C to -80°C.

Storage, Stability/Shelf Life

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