

Product Data Sheet

Cat#	SP-89730-1
Description:	TNF- α (78-96) (human) (AA: His-Thr-Ile-Ser-Arg-Ile-Ala-Val-Ser-Tyr-Gln-Thr-Lys-Val-Asn-Leu-Leu-Ser-Ala) (MW: 2101.45)
Size:	1 mg
Purity:	>95%
Store:	Desiccated at -20oC.

Tumor necrosis factor (TNF, cachexin or cachectin and formally known as tumor necrosis factor-alpha) is a cytokine involved in systemic inflammation and is a member of a group of cytokines that stimulate the acute phase reaction. The primary role of TNF is in the regulation of immune cells. TNF is also able to induce apoptotic cell death, to induce inflammation, and to inhibit tumorigenesis and viral replication. Dysregulation and, in particular, overproduction of TNF have been implicated in a variety of human diseases, as well as cancer.

TNF is primarily produced as a 212-amino acid-long type II transmembrane protein arranged in stable homotrimers (protein accession #P012375). From this membrane-integrated form the soluble homotrimeric cytokine (sTNF) is released via proteolytic cleavage by the metalloprotease TNF alpha converting enzyme (TACE, also called ADAM17). The soluble 51 kDa trimeric sTNF tends to dissociate at concentrations below the nanomolar range, thereby losing its bioactivity. Large amounts of TNF are released in response to lipopolysaccharide, other bacterial products, and Interleukin-1 (IL-1). TNF can bind two receptors, TNF-R1 (TNF receptor type 1; CD120a; p55/60) and TNF-R2 (TNF receptor type 2; CD120b; p75/80). TNF-R1 is expressed in most tissues, and can be fully activated by both the membrane-bound and soluble trimeric forms of TNF, whereas TNF-R2 is found only in cells of the immune system, and respond to the membrane-bound form of the TNF homotrimer.

Recombinant TNF is used as an immunostimulant under the INN tasonermin.

References: Locksley RM (2001) Cell 104, 487-501; Clark IA (2007) Cytokine Growth Factor Rev. 18: 335-343; Walsh LJ (1991) PNAS 88, 4220-4224; Gaur U (2003) Biochem. Pharmacol. 66 (8): 1403-8; Tang P (1996) Biochemistry 35 (25): 8216-25

Related Items

Catalog#	ProdDescription
100-210-TNM	Mouse TNF-alpha ELISA Kit, 96 tests,
100-215-TNH	Human TNF-alpha ELISA Kit, 96 tests,
200-300-ADG	Humira/Adalumumab (Human Anti-TNF-alpha) ELISA Kit for dog, 96 tests
200-310-ADG	Humira/Adalumumab (Human Anti-TNF-alpha) ELISA Kit for human, 96 tests
200-320-ADG	Human Anti-Humira/Adalumumab (Human Anti-TNF-alpha) IgG ELISA Kit, 96 tests
FAS21-M	Rat-Anti-mouse FAS/TNFRSF6 (CD95) protein IgG, aff pure

MA-20161 Mouse Monoclonal Anti-Human Tumor Necrosis Factor (TNF-alpha)

MCD120A-PE Anti-Mouse CD120a (TNF-R, p55), PE
RP-1619 Recombinant (E. coli) Human
BAFF/CD257 (BLYS, TALL1, THANK, TNFSF20) protein, pure

SP-101331-5 Tumor necrosis factor alpha (TNF- α (71-82)

SP-55385-1 P55-TNFR

SP-55386-1 P75-TNFR [H-Ser-Met-Ala-Pro-Gly-Ala-Val-His-Leu-Pro-Gln-Pro-OH;

SP-86635-5 Tumor necrosis factor alpha TNF- α (72 - 82),

SP-86636-1 Tumor necrosis factor alpha TNF- α (31 - 45),

SP-89727-1 Tumor necrosis factor alpha TNF- α (10-36)

SP-89728-1 Tumor necrosis factor alpha TNF- α (46-65)

SP-89729-5 [Ile76]-TNF-a (70-80)

SP-89730-1 Tumor necrosis factor alpha TNF- α (78-96)

TACE11-A Anti-Rat TNF-alpha Converting Enzyme (TACE), IgG aff. Pure

TACE11-P Rat TNF-alpha Converting Enzyme (TACE) Control/blocking peptide

TNFA11-M Monoclonal Anti-Human TNF-alpha IgG #1

TNFA12-M Monoclonal Anti-Human TNF-alpha IgG #2,

TNFA13-A Anti-Human TNF-alpha IgG #2, aff. Pure

TNFA15-R-10 Recombinant purified human Tumor Necrosis Factor-Alpha (TNF-alpha), biologically active

TNFA25-R-5 Recombinant purified rat Tumor Necrosis Factor-Alpha (TNF-alpha), biologically active

TNFA35-R-5 Recombinant purified mouse Tumor Necrosis Factor-Alpha (TNF-alpha), biologically active

TNFR25-R-20 Recombinant purified human TNF Receptor 2 (TNFR2/TNF-RII, Etanercept/TNF-R75, p75TNFR) protein

All peptides are for in vitro research use only.

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