

Recombinant Porcine Tumor Necrosis Factor

Cat. No. TNF-5525P **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant porcine TNF is produced in E. coli and purified via sequential chromatography.
Species	Porcine
Source	E.coli
Description	Tumor necrosis factor (TNF, cachexin or cachectin formerly known as tumor necrosis factor-alpha or TNF- α) is a cytokine involved in systemic inflammation and is a member of a group of cytokines that stimulate the acute phase reaction. It is produced chiefly by activated macrophages, although it can be produced by other cell types as well. The primary role of TNF is in the regulation of immune cells. TNF, being an endogenous pyrogen, is able to induce fever, to induce apoptotic cell death, to induce sepsis (through IL1 & IL6 production), to induce cachexia, induce inflammation, and to inhibit tumorigenesis and viral replication.
Form	Lyophilized, carrier free
Molecular Weight	17.1 kDa
Purity	>95% as determined by SDS-PAGE analysis
Endotoxin	<0.1 ng/g
Biological Activity	ED50 range = 0.001-0.015 ng/mL, determined by the dose dependent cytotoxicity of

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porcinePK15 cells. Optimal concentration for individual application should be determined by a dose response assay.

Reconstitution

We recommend that the vial be briefly centrifuged prior to opening to bring the contents to the bottom. Lyophilized porcine TNF-alpha should be reconstituted in sterile, deionized H₂O to 0.1-1.0 mg/mL to regain full activity. These stock solutions should be apportioned into working aliquots and stored below -20°C. Further dilutions should be made in low endotoxin medium or buffered solution with heat inactivated FCS or tissue culture grade BSA.

Storage

Lyophilized porcine TNF-alpha should be stored at 2-8°C, preferably desiccated. Store reconstituted porcine TNF-alpha below -20°C (not in a frost-free freezer). Keep freeze-thaw cycles to a minimum.

Official Symbol

TNF

GENE INFORMATION

Gene Name

TNF tumor necrosis factor [[Susscrofa](#)]

Synonyms

TNF; tumor necrosis factor; TNFa; TNF-a; TNF-alpha; tumor-necrosis factor; cachectin; tumor necrosis factor alpha; tumor necrosis factor (TNF superfamily, member 2); tumor necrosis factor ligand superfamily member 2

Gene ID

[397086](#)

mRNA Refseq

[NM_214022](#)

Protein Refseq

[NP_999187](#)

UniProt ID

P23563

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**Chromosome
Location**

7p11-q11; 7

Pathway

Adipocytokinesignaling pathway; Cytokine-cytokine receptor interaction; Death ReceptorSignalling; Extrinsic Pathway for Apoptosis; Fc epsilon RI signaling pathway;Graft-versus-host disease; Hematopoietic cell lineage; Leishmaniasis; MAPKsignaling pathway; Natural killer cell mediated cytotoxicity; Osteoclastdifferentiation; RIG-I-like receptor signaling pathway; Systemic lupuserythematosus; TGF-beta signaling pathway; Type II diabetes mellitus

**PDB rendering
basedon 1TNF.** Tel: 1-631-559-9269 1-516-512-3133 Email: info@creative-biomart.com  Fax: 1-631-938-8127 45-1 Ramsey Road, Shirley, NY 11967, USA