

## ARG70411 Pig TNF alpha recombinant protein (Active) (His-tagged, C-ter)

Package: 100 µg, 20 µg  
Store at: -20°C

### Summary

Product Description	E. coli expressed, His-tagged (C-ter) Active Pig TNF recombinant protein
Tested Application	SDS-PAGE
Target Name	TNF alpha
Species	Pig
A.A. Sequence	Leu77 - Leu232
Expression System	E. coli
Activity	Active
Activity Note	Determined by its ability to induce cytotoxicity in PK15 cells in the presence of the actinomycin D. The ED50 for this effect is < 15 pg/mL.
Alternate Names	TNF; Tumor Necrosis Factor; TNF-Alpha; TNFSF2; TNFA; DIF; Tumor Necrosis Factor Ligand Superfamily Member 2; TNF-A; Tumor Necrosis Factor (TNF Superfamily, Member 2); Tumor Necrosis Factor Ligand 1F; Tumor Necrosis Factor-Alpha; Tumor Necrotic Factor Alph; TNF Superfamily, Member 2; TNF, Macrophage-Derived; TNF, Monocyte-Derived; APC1 Protein Cachectin; TNLG1F

### Properties

Form	Powder
Purification Note	Endotoxin level is less than 0.1 EU/µg of the protein, as determined by the LAL test.
Purity	> 98% (by SDS-PAGE)
Buffer	PBS (pH 7.4)
Reconstitution	It is recommended to reconstitute the lyophilized protein in sterile water to a concentration not less than 200 µg/mL and incubate the stock solution for at least 20 min at room temperature to make sure the protein is dissolved completely.
Storage instruction	For long term, lyophilized protein should be stored at -20°C or -80°C. After reconstitution, aliquot and store at -20°C or -80°C for up to one month. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening.
Note	For laboratory research only, not for drug, diagnostic or other use.

### Bioinformation

Gene Symbol	TNF
Gene Full Name	Tumor Necrosis Factor
Background	This gene encodes a multifunctional proinflammatory cytokine that belongs to the tumor necrosis factor (TNF) superfamily. This cytokine is mainly secreted by macrophages. It can bind to, and thus functions through its receptors TNFRSF1A/TNFR1 and TNFRSF1B/TNFR. This cytokine is involved in the regulation of a wide spectrum of biological processes including cell proliferation, differentiation, apoptosis, lipid metabolism, and coagulation. This cytokine has been implicated in a variety of diseases, including autoimmune diseases, insulin resistance, psoriasis, rheumatoid arthritis ankylosing spondylitis, tuberculosis, autosomal dominant polycystic kidney disease, and cancer. Mutations in this

gene affect susceptibility to cerebral malaria, septic shock, and Alzheimer disease. Knockout studies in mice also suggested the neuroprotective function of this cytokine.

**Function**

Cytokine that binds to TNFRSF1A/TNFR1 and TNFRSF1B/TNFR. It is mainly secreted by macrophages and can induce cell death of certain tumor cell lines. It is potent pyrogen causing fever by direct action or by stimulation of interleukin-1 secretion and is implicated in the induction of cachexia, Under certain conditions it can stimulate cell proliferation and induce cell differentiation. Impairs regulatory T-cells (Treg) function in individuals with rheumatoid arthritis via FOXP3 dephosphorylation. Up-regulates the expression of protein phosphatase 1 (PP1), which dephosphorylates the key 'Ser-418' residue of FOXP3, thereby inactivating FOXP3 and rendering Treg cells functionally defective.

**PTM**

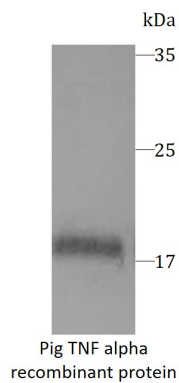
Disulfide bond, Glycoprotein, Lipoprotein, Myristate, Phosphoprotein

**Cellular Localization**

Cell membrane, Membrane Secreted

## Images

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ARG70411 Pig TNF alpha recombinant protein (Active) (His-tagged, C-ter) SDS-PAGE image

SDS-PAGE analysis of ARG70411 Pig TNF alpha recombinant protein (Active) (His-tagged, C-ter)