

## Active Recombinant Pig TNF protein, His-tagged

Cat. No. TNF-436P Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Active Recombinant Pig TNF protein(P23563)(57~232 aa), fused with N-terminal His tag, was expressed in E.coli.
<b>Species</b>	Pig
<b>Source</b>	E.coli
<b>ProteinLength</b>	57-232 aa
<b>Form</b>	Lyophilized from sterile PBS, pH7.4, containing 0.01% SKL, 1mM DTT, 5% Trehalose and Proclin300.
<b>Bio-activity</b>	<p>Tumor necrosis factor (TNF, tumor necrosis factor alpha, TNF<math>\alpha</math>, cachexin, orcachectin) is a cell signaling protein (cytokine) involved in systemic inflammation and is one of the cytokines that make up the acute phase reaction. The primary role of TNF is in the regulation of immune cells. TNF, being an endogenous pyrogen, is able to induce fever, apoptotic cell death, cachexia, inflammation and to inhibit tumorigenesis and viral replication and respond to sepsis via L1&amp;IL6 producing cells. To test the effect of TNF<math>\alpha</math> on cell apoptosis, A549 cells were seeded into 96-well plates at a density of 4,000 cells/well with 5% serum standard DMEM including various concentrations of recombinant pig TNF<math>\alpha</math>. After incubated for 48h, cells were observed by inverted microscope and cell proliferation was measured by Cell Counting Kit-8 (CCK-8). Briefly, 10<math>\mu</math>l of CCK-8 solution was added to each well of the plate, then the absorbance at 450 nm was measured using a microplate reader after</p>

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incubating the plate for 1h at 37°C. Proliferation of A549 cells after incubation with TNF $\alpha$  for 72h observed by inverted microscope was shown. Cell viability was assessed by CCK-8 (Cell Counting Kit-8) assay after incubation with recombinant pig TNF $\alpha$  for 72h. It was obvious that TNF $\alpha$  significantly inhibit cell viability of A549 cells. The ED50 is 2.4 $\mu$ g/mL.

<b>Molecular Mass</b>	22.9kDa
<b>Endotoxin</b>	<1.0EU per 1 $\mu$ g (determined by the LAL method).
<b>Purity</b>	> 90% as determined by SDS-PAGE.
<b>Storage</b>	Avoid repeated freeze/thaw cycles. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.
<b>Reconstitution</b>	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

## GENE INFORMATION

<b>Gene Name</b>	TNF tumor necrosis factor [ <i>Sus scrofa</i> ]
<b>Official Symbol</b>	TNF
<b>Synonyms</b>	TNF; tumor necrosis factor; TNF-a; TNF-alpha; cachectin; tumor-necrosis factor; tumor necrosis factor alpha; tumor necrosis factor (TNF superfamily, member 2); tumor necrosis factor ligand superfamily member 2; TNF $\alpha$ ;
<b>Gene ID</b>	397086
<b>mRNA Refseq</b>	NM_214022

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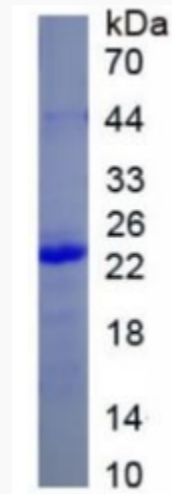
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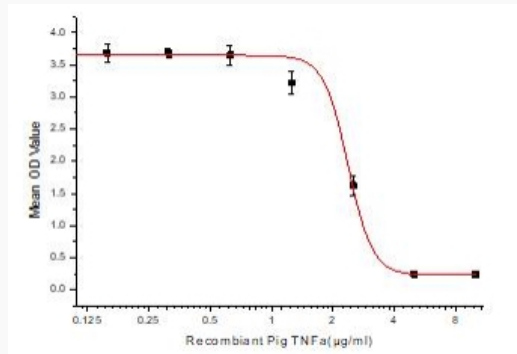
Protein Refseq

NP\_999187

SDS-PAGE



Activity



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