

## Swine recombinant TNF alpha (Tumor necrosis factor alpha) protein, AF

Catalog Number: PROTP23563-1

### Overview

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| Product Name | Swine recombinant TNF alpha (Tumor necrosis factor alpha) protein, AF                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Description  | Tumor necrosis factor alpha (TNF alpha) stimulates the acute phase of the immune response. In response to a pathogen, TNF alpha is one of the first to be released and can apply its effects in many organs. TNF alpha stimulates the release of corticotropic releasing hormone, suppresses appetite, and induces fever, in the hypothalamus. TNF increase vasodilation and loss of vascular permeability, it helps recruit lymphocyte, neutrophil, and monocyte to the inflammation site by regulating chemokine release. |
| Size         | 5ug,20ug                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Tag          | His Tag (C-term)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Form         | Lyophilized                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Source       | Escherichia coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Formulation  | The protein was lyophilized from a 0.2 um filtered solution containing 1X PBS, pH 7.4. If you have any concerns or special requirements, please confirm with us.                                                                                                                                                                                                                                                                                                                                                            |

### Storage

Lyophilized protein should be stored at -20°C for 1 year. Upon reconstitution, store at 2°C to 8°C for up to 1 week. Further dilute in a buffer containing a carrier protein or stabilizer (e.g. 0.1% BSA, 10%FBS, 5%HSA or 5% trehalose solution), protein aliquots should be stored at -20°C or -80°C for 3-6 months. Avoid repeated freeze/thaw cycles.

### Purity

>98% as determined by SDS-PAGE.

### Molecular weight

The protein has a calculated MW of 18.1 kDa. The protein migrates as 13 kDa under reducing condition (SDS-PAGE analysis).

### Activity

Measure by its ability to induce cytotoxicity in PK15 cells in the presence of the actinomycin D. The ED<sub>50</sub> for this effect is <15 pg/mL.

### Endotoxin

<0.1 EU per 1 ug of the protein by the LAL method.

### Amino Acid Sequence

MLRSSSTSDKPVAVVAVNVKAEGQLQWQSGYANALLANGVKLKDNLVVPTDGLYLIYSQVLFRGQGCPSTNVFLTHTISRIAVSYQTKVNLLSAIKS  
PCQRETPEGAEAKPWYEPIYLGGVFQLEKDDRLSAEINLPDYLDFAESGQVYFGIAL with polyhistidine tag at the C-terminus.

### Reconstitution

Centrifuge at 3000 rpm for 5 mins before opening. It is recommended to reconstitute the lyophilized protein in sterile H<sub>2</sub>O to a concentration not less than 100 ug/mL and incubate the stock solution at room temperature for at least 20 mins to ensure sufficient re-dissolved. Do Not Vortex! Vigorous shaking may impair the biological activity of the protein.

## Usage

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