

Datasheet for 009-001-W29-0005

## rHuman TNF Receptor-1 Protein

### Overview

<b>Description:</b>	Human Tumor Necrosis Factor Receptor Type 1 Recombinant Protein - 009-001-W29-0005
<b>Item No.:</b>	009-001-W29-0005
<b>Size:</b>	5 µg
<b>Applications:</b>	SDS-PAGE, Cellular Assay
<b>Origin:</b>	Human
<b>Expressed in:</b>	E. coli

### Product Details

<b>Background:</b>	TNF Receptor 1 (TNFR1) is expressed in most tissues and is activated by soluble and membrane-bound TNF $\alpha$ . TNFR1 is known to activate NF- $\kappa$ B and MAPK pathways to induce inflammation, promote apoptotic cell death, inhibit tumorigenesis and inhibit viral replication. The soluble form of recombinant human TNFR1 is a non-glycosylated protein, containing 162 amino acids, with a molecular weight of 18.3 kDa.
<b>Synonyms:</b>	Tumor necrosis factor receptor 1 (TNF-R1), Tumor necrosis factor receptor type 1, TNFAR, TNFR55, p55, p60, CD120a
<b>Species of Origin:</b>	Human
<b>Expressed in:</b>	E. coli
<b>Type:</b>	Recombinant Protein
<b>Low Endotoxin:</b>	Yes

### Target Details

<b>Gene Name:</b>	TNFRSF1A
<b>Purity/Specificity:</b>	Tumor Necrosis Factor Receptor Type 1 purity was determined to be greater than 97% as determined by analysis by UV-Spectroscopy at 280nm and by reducing and non-reducing SDS-pAGE.
<b>Relevant Links:</b>	<ul style="list-style-type: none"><li>• <a href="#">UniProtKB - P19438</a></li></ul>

## Application Details

<b>Tested Applications:</b>	SDS-PAGE
<b>Suggested Applications:</b>	Cellular Assay (Based on references)
<b>Application Note:</b>	Tumor Necrosis Factor Receptor Type 1 Recombinant Protein has been tested by SDS-PAGE and biological activity and is suitable as a control for polyclonal or monoclonal anti-Tumor Necrosis Factor Receptor Type 1 in immunological assays.
<b>Assay Dilutions:</b>	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
<b>Other:</b>	Endotoxin Level: Measured by kinetic LAL analysis and is typically $\leq 1$ EU/ $\mu$ g protein. Biologic Activity: The activity is determined by its ability to inhibit the cytolytic effects 0.25 ng/mL TNF $\alpha$ has on mouse L929 cells, in the presence of Actinomycin D, and is typically between 0.045-0.09 ng/mL.

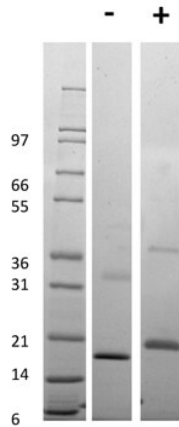
## Formulation

<b>Physical State:</b>	Lyophilized
<b>Buffer:</b>	0.01 M Sodium Phosphate, pH 7.5
<b>Preservative:</b>	None
<b>Stabilizer:</b>	None
<b>Reconstitution Volume:</b>	5 $\mu$ l (5-50 $\mu$ l)
<b>Reconstitution Buffer:</b>	Restore with deionized water (or equivalent)

## Shipping & Handling

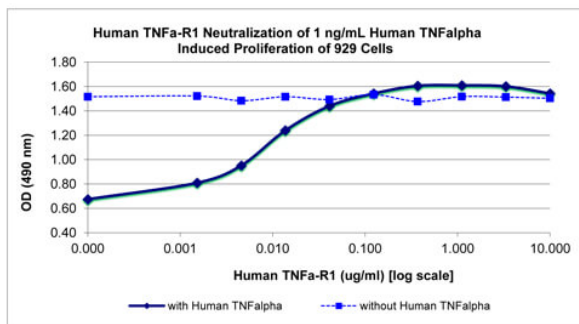
<b>Shipping Condition:</b>	Ambient
<b>Storage Condition:</b>	Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.
<b>Expiration:</b>	Expiration date is six (6) months from date of receipt.

## Images



#### SDS-PAGE

SDS-PAGE of Human Tumor Necrosis Factor Receptor Type 1 Recombinant Protein. Lane 1: Molecular weight marker. Lane 2: 1 µg Human TNF-Receptor 1 in non-reducing conditions (-). Lane 3: 1 µg Human TNF-Receptor 1 in reducing conditions (+). Human TNF-Receptor 1 has a predicted MW of 18.3 kDa.



#### SDS-PAGE

Bioactivity of Human Tumor Necrosis Factor Receptor Type 1 Recombinant Protein. 929 cells were cultured with 1 ng/mL Human TNF-alpha and 1 ug/mL Actinomycin D, plus serial dilutions of Human TNF-Receptor 1 from 0-10 ug/mL. Cell proliferation was measured after 24 hours and the linear portion of the curve was used to calculate the ED50. The ED50 of Human TNF Receptor 1 is 8-12 ng/mL. This typical expected value for this activity is 9-45 ng/mL.

## Disclaimer

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