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Datasheet for 009-001-W29-0005

rHuman TNF Receptor-1 Protein

Overview

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

Product Details

Background:	TNF Receptor 1 (TNFR1) is expressed in most tissues and is activated by soluble and membrane-bound TNFα. TNFR1 is known to activate NF-kB 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.
Synonyms:	Tumor necrosis factor receptor 1 (TNF-R1), Tumor necrosis factor receptor type 1, TNFAR, TNFR55, p55, p60, CD120a
Species of Origin:	Human
Expressed in:	E. coli
Type:	Recombinant Protein
Low Endotoxin:	Yes

Target Details

Gene Name:	TNFRSF1A
Purity/Specificity:	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.
Relevant Links:	• UniProtKB - P19438

Application Details

Tested Applications:	SDS-PAGE
Suggested Applications:	Cellular Assay (Based on references)
Application Note:	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.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
Other:	Endotoxin Level: Measured by kinetic LAL analysis and is typically ≤ 1 EU/µg protein. Biologic Activity: The activity is determined by its ability to inhibit the cytolytic effects 0.25 ng/mL TNFα has on mouse L929 cells, in the presence of Actinomycin D, and is typically between 0.045-0.09 ng/mL.

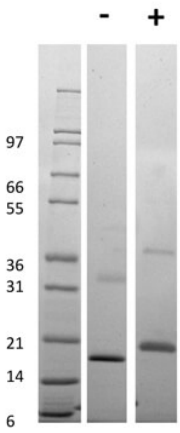
Formulation

Physical State:	Lyophilized
Buffer:	0.01 M Sodium Phosphate, pH 7.5
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	5µl (5-50µl)
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

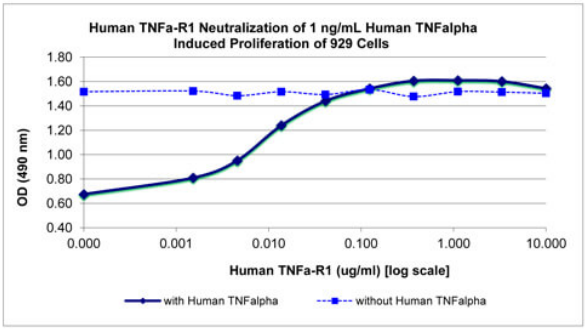
Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results 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.
Expiration:	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 us 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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