

Product datasheet

Recombinant human TNF alpha protein ab206641

1 References 3 Images

Description

Product name	Recombinant human TNF alpha protein	
Biological activity	Biological Activity: The activity is determined by the cytolysis of mouse L929 cells in the presence of Actinomycin D and is typically less than 0.05 ng/mL.	
Purity	> 95 % SDS-PAGE.	
Endotoxin level	<=1.000 Eu/µg	
Expression system	Escherichia coli	
Accession	P01375	
Protein length	Protein fragment	
Animal free	No	
Nature	Recombinant	
Species	Human	
Sequence	VRSSSRTPSDKPVAVHVVANPQAEGQLQWLNRRANALLA NGVELRDNQLVV PSEGLYLIYSQVLFKGGQCPSTHVLLTHTISRIAVSYQTKVN LLSAIKSP CQRETPEGAEAKPWYEPYMLGGVFQLEKGDRLSAEINRPD YLDFAESGQV YFGIAL	
Predicted molecular weight	18 kDa	
Amino acids	77 to 233	
Additional sequence information	Corresponds to Tumor necrosis factor, soluble form	

Specifications

Our [Abpromise guarantee](#) covers the use of **ab206641** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Functional Studies SDS-PAGE
Form	Lyophilized

Preparation and Storage

Stability and Storage

Shipped at 4°C. Store at -20°C. For long term storage it is recommended to add a carrier protein on reconstitution (0.1% HSA or BSA).

Constituent: 0.2% Sodium phosphate

This product is an active protein and may elicit a biological response in vivo, handle with caution.

Reconstitution

Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile water at a concentration of 0.1 mg/mL, which can be further diluted into other aqueous solutions. Reconstituted material should be aliquoted and frozen at -20°C.

General Info

Function

Cytokine that binds to TNFRSF1A/TNFR1 and TNFRSF1B/TNFR2. 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.

Involvement in disease

Genetic variations in TNF are a cause of susceptibility psoriatic arthritis (PSORAS) [MIM:607507]. PSORAS is an inflammatory, seronegative arthritis associated with psoriasis. It is a heterogeneous disorder ranging from a mild, non-destructive disease to a severe, progressive, erosive arthropathy. Five types of psoriatic arthritis have been defined: asymmetrical oligoarthritis characterized by primary involvement of the small joints of the fingers or toes; asymmetrical arthritis which involves the joints of the extremities; symmetrical polyarthritis characterized by a rheumatoidlike pattern that can involve hands, wrists, ankles, and feet; arthritis mutilans, which is a rare but deforming and destructive condition; arthritis of the sacroiliac joints and spine (psoriatic spondylitis).

Sequence similarities

Belongs to the tumor necrosis factor family.

Post-translational modifications

The soluble form derives from the membrane form by proteolytic processing.

The membrane form, but not the soluble form, is phosphorylated on serine residues.

Dephosphorylation of the membrane form occurs by binding to soluble TNFRSF1A/TNFR1.

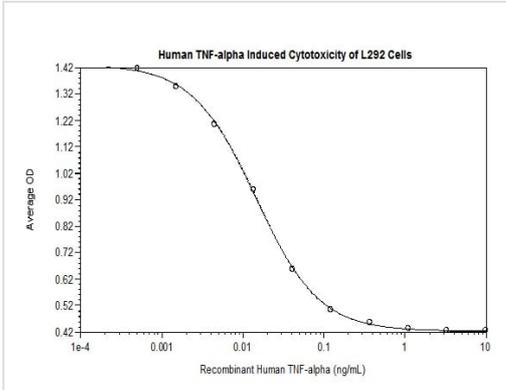
O-glycosylated; glycans contain galactose, N-acetylgalactosamine and N-acetylneuraminic acid.

Cellular localization

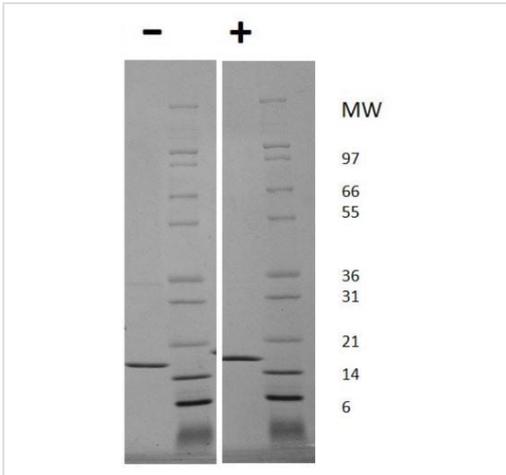
Secreted and Cell membrane.

Images

Functional analysis of ab206641

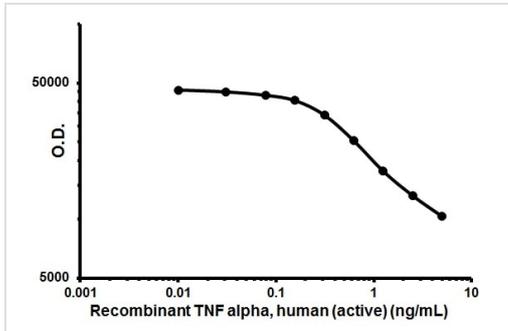


Functional Studies - Recombinant human TNF alpha protein (ab206641)



SDS-PAGE - Recombinant human TNF alpha protein (ab206641)

SDS PAGE analysis of ab206641 under non-reducing (-) and reducing (+) conditions. Stained with Coomassie Blue.



The cytotoxicity of mouse L929 cells in the presence of Actinomycin D with ab206641.

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