abcam

Product datasheet

Recombinant rat TNF alpha protein (Active) ab269242

1 Image

Description

Product name Recombinant rat TNF alpha protein (Active)

Biological activity Cytolysis of mouse L929 cells in the presence of Actinomycin D≤50 pg/mL; ≥ 2.0 x 10^7 units/mg

(typical ED_{50} is < 10 pg/mL).

Purity > 95 % SDS-PAGE.

NULL

Endotoxin level< 1.000 Eu/μg</th>Expression systemEscherichia coli

Accession P16599

Protein length Full length protein

Animal free No

Nature Recombinant

Species Rat

Sequence MLRSSSQNSS DKPVAHVVAN HQAEEQLEWL

SQRANALLAN GMDLKDNQLV VPADGLYLIY SQVLFKGQGC PDYVLLTHTV SRFATSYQEK VSLLSAIKSP CPKDTPEGAE LKPWYEPMYL

GGVSQLEKGD LLSAEVNLPK YLDITESGQV YFGVIAL

Predicted molecular weight 25 kDa

Amino acids 80 to 235

Additional sequence information Mature soluble chain

Specifications

Our Abpromise guarantee covers the use of ab269242 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

1

Stability and Storage

Shipped at Room Temperature. Upon delivery aliquot. Store at -20 $^{\circ}\text{C}$ or -80 $^{\circ}\text{C}$. Working aliquots

stored with a carrier protein are stable for at least 3 months at -20°C to -80°C..

Constituents: 0.16% Sodium phosphate, 0.29% Sodium chloride

Lyophilized from

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

Reconstitution

Sterile water at 0.1 mg/mL

General Info

Function

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

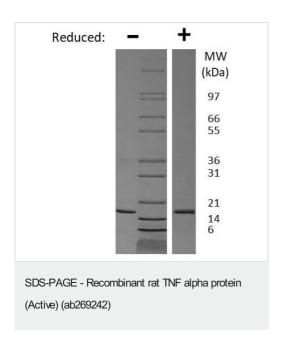
Dephosphorylation of the membrane form occurs by binding to soluble TNFRSF1A/TNFR1.

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

Cellular localization

Secreted and Cell membrane.

Images



SDS-PAGE analysis of ab269242 at 1ug/lane under (-) non-reducing and (+) reducing conditions. 4-20% Tris glycine gel. Stained with coomassie blue.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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