# abcam

## Product datasheet

# Recombinant rat TNF alpha protein ab9756

### \* \* \* \* \* 1 Abreviews

**Description** 

Product name Recombinant rat TNF alpha protein

**Biological activity** The **ED**<sub>50</sub> as determined by the cytolysis of murine L929 cells in the presence of actinomycin D is

 $\leq$  0.05 ng/ml, corresponding to a specific activity of  $\geq$  2 x 10<sup>7</sup> units/mg.

**Purity** >= 98 % SDS-PAGE.

Purity determined by SDS-PAGE gel and HPLC analyses.

Expression system Escherichia coli

Accession P16599

Protein length Full length protein

Animal free No

**Nature** Recombinant

**Species** Rat

Sequence MLRSSSQNSS DKPVAHVVAN HQAEEQLEWL

SQRANALLAN GMDLKDNQLV VPADGLYLIY

SQVLFKGQGC PDYVLLTHTV SRFAISYQEK VSLLSAIKSP

CPKDTPEGAE LKPWYEPMYL GGVFQLEKGD

LLSAEVNLPK YLDITESGQV YFGVIAL

Amino acids 80 to 235

Additional sequence information 
Corresponds to the mature soluble, biologically active form.

#### **Specifications**

Our Abpromise guarantee covers the use of ab9756 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

Additional notes The ED<sub>50</sub>, determined by the cytolysis of murine L929 cells in the presence of actinomycin D, is <

0.05 ng/ml, corresponding to a specific activity of  $> 5 \times 10^7$  units/mg.

**Preparation and Storage** 

1

Stability and Storage Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

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

**Reconstitution** For lot specific reconstitution information please contact our Scientific Support Team.

#### **General Info**

modifications

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** 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.

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

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

#### Terms and conditions

Guarantee only valid for products bought direct from Abcam or one of our authorized distributors