# abcam

# Product datasheet

# Recombinant Rat IL-1 alpha Protein (Active) ab290099

# 4 Images

**Description** 

Product name Recombinant Rat IL-1 alpha Protein (Active)

**Biological activity** Fully biologically active determined by the dose dependent proliferation of D10S cells. The ED50

≤ 5.07 pg/ml, corresponding to a specific activity of 1.97 x 10<sup>8</sup> units/mg.

**Purity** >= 95 % HPLC.

SDS-PAGE >= 95%

Endotoxin level <=0.005 Eu/μg
Expression system HEK 293 cells

Accession P16598

Protein length Full length protein

Animal free Yes
Carrier free Yes

Nature Recombinant

**Species** Rat

Sequence SAPHSFQNNLRYKLIRIVKQEFIMNDSLNQNIYVDMDRIHLK

AASLNDLQ

LEVKFDMYAYSSGGDDSKYPVTLKVSNTQLFVSAQGEDK

**PVLLKEIPETP** 

KLITGSETDLIFFWEKINSKNYFTSAAFPELLIATKEQSQVHL

ARGLPSM IDFQIS

**Predicted molecular weight** 18 kDa

Actual molecular weight 18 kDa

**Molecular weight information** Predicted MW is 17850.37 Da (+/- 10 Da by ESI-TOF). Observed MW is 17851.27 Da.

Amino acids 115 to 270

Additional sequence information N-terminal glycine; Mature form

#### **Specifications**

Our **Abpromise guarantee** covers the use of **ab290099** in the following tested applications.

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

**Applications** SDS-PAGE

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Mass Spectrometry

**HPLC** 

Form Lyophilized

# **Preparation and Storage**

**Stability and Storage** Shipped at Room Temperature. Store at Room Temperature.

pH: 7.4

 $Constituents: 0.727\%\ Dibasic\ monohydrogen\ potassium\ phosphate,\ 0.248\%\ Monobasic$ 

dihydrogen potassium phosphate, 10.26% Trehalose

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

**Reconstitution** Lyophilized contents may appear as either a translucent film or a white powder. This variance

does not affect the quality of the product. Store lyophilized form at room temperature. Reconstitute in phosphate buffered saline, aliquot and store at -80°C for 12 months or +4°C for 1 week. Avoid

repeated freeze-thaw.

#### **General Info**

**Function** Produced by activated macrophages, IL-1 stimulates thymocyte proliferation by inducing IL-2

release, B-cell maturation and proliferation, and fibroblast growth factor activity. IL-1 proteins are involved in the inflammatory response, being identified as endogenous pyrogens, and are reported to stimulate the release of prostaglandin and collagenase from synovial cells.

**Sequence similarities**Belongs to the IL-1 family.

**Domain** The similarity among the IL-1 precursors suggests that the amino ends of these proteins serve

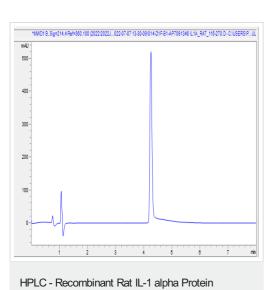
some as yet undefined function.

Cellular localization Secreted. The lack of a specific hydrophobic segment in the precursor sequence suggests that IL-

1 is released by damaged cells or is secreted by a mechanism differing from that used for other

secretory proteins.

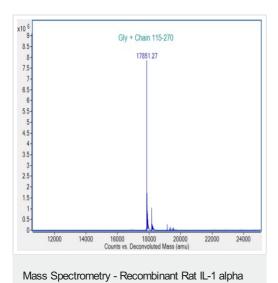
## **Images**



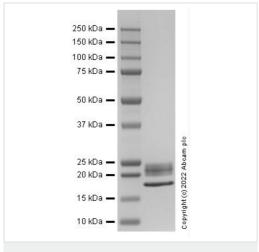
(ab290099)

Protein (ab290099)

HPLC analysis of ab290099

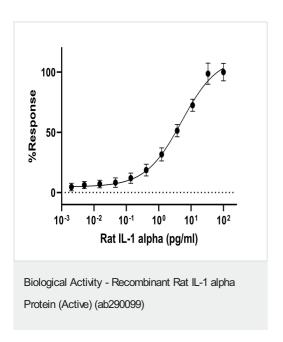


Mass determination by ESI-TOF. Predicted MW is 17850.37 Da (+/- 10 Da by ESI-TOF). Observed MW is 17851.27 Da.



SDS-PAGE analysis of ab290099

SDS-PAGE - Recombinant Rat IL-1 alpha Protein (ab290099)



Fully biologically active determined by the dose dependent proliferation of D10S cells. The ED50  $\leq$  5.07 pg/ml, corresponding to a specific activity of 1.97 x 10<sup>8</sup> units/mg.

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

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