abcam

Product datasheet

Recombinant human IL-3 protein (Active) ab259404

4 Images

Description

Product name Recombinant human IL-3 protein (Active)

Biological activity Fully active compared to a standard. The ED₅₀ as determined by the dose-dependant

proliferation of TF-1 cells is 0.8577 ng/mL corresponding to a Specific Activity of 1.17 x 10⁶

IU/mg.

Purity >= 95 % SDS-PAGE.

Purity by HPLC >=95%.

Endotoxin level < 0.005 Eu/µg

Expression system HEK 293 cells

Accession P08700

Protein length Full length protein

Animal free Yes
Carrier free Yes

Nature Recombinant

Species Human

Sequence APMTQTTSLKTSWVNCSNMIDEIITHLKQPPLPLLDFNNLN

GEDQDILME

NNLRRPNLEAFNRAVKSLQNASAIESILKNLLPCLPLATAA

PTRHPIHIK

DGDWNEFRRKLTFYLKTLENAQAQQTTLSLAIF

Predicted molecular weight 15 kDa

Molecular weight information M + 2.61 Da (Calc mass 15138.39 Da).

APMTQTTSLKTSWVNCSNMIDEIITHLKQPPLPLLDFNNLNGEDQDILMENNLRRPNLEAFNRA VKSLQNASAIESILKNLLPCLPLATAAPTRHPIHIKDGDWNEFRRKLTFYLKTLENAQAQQTTLSL

AIF

Amino acids 20 to 152

Additional sequence information N-terminal glycine. Full-length mature chain lacking the signal peptide.

Specifications

Our **Abpromise guarantee** covers the use of **ab259404** in the following tested applications.

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

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Applications SDS-PAGE

Functional Studies

HPLC

Mass Spectrometry

Cell Culture

Form Lyophilized

Additional notes This protein is filter sterilised prior to aliquoting and lyophilisation. All aliquoting and lyophilisation

steps are performed in a sterile environment

Preparation and Storage

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

pH: 6.00

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

dihydrogen potassium phosphate, 10.26% Trehalose

Buffer lyophilized from.

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

Reconstitution Reconstitute with phosphate buffered saline. Store lyophilized form at room temperature.

Reconstitute, aliquot and store at -80°C for 12 months or +4°C for 1 week. Avoid repeated freeze-

thaw. Lyophilized contents may appear as either a translucent film or a white powder. This

variance does not affect the quality of the product.

General Info

Function Granulocyte/macrophage colony-stimulating factors are cytokines that act in hematopoiesis by

controlling the production, differentiation, and function of 2 related white cell populations of the

blood, the granulocytes and the monocytes-macrophages.

This CSF induces granulocytes, macrophages, mast cells, stem cells, erythroid cells, eosinophils

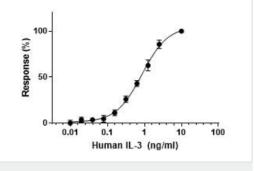
and megakaryocytes.

Tissue specificity Activated T-cells, mast cells, natural killer cells.

Sequence similarities Belongs to the IL-3 family.

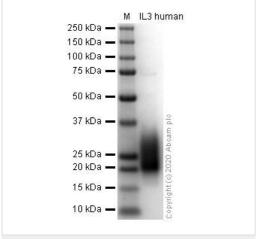
Cellular localization Secreted.

Images

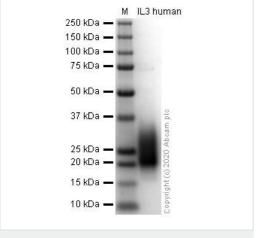


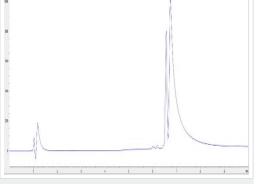
Functional Studies - Recombinant human IL-3 protein (ab259404)

Fully active compared to a standard. The ${\rm ED}_{50}$ as determined by the dose-dependant proliferation of TF-1 cells is 0.8577 ng/mL corresponding to a Specific Activity of 1.17 x 10⁶ IU/mg.



SDS-PAGE - Recombinant human IL-3 protein (ab259404)





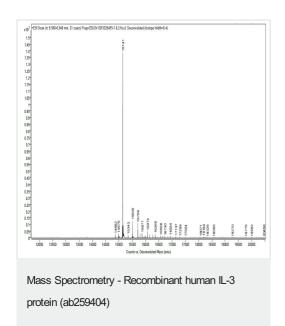
HPLC - Recombinant human IL-3 protein (ab259404)

SDS-PAGE analysis of ab259404.

Purity: 95%.

Sample was deglycosylated prior to HPLC run; the deglycosylation enyzmes account for the second peak.

The spectrum was recorded using a 1260 Infinity II HPLC system with DAD and a MabPac RP column (3.0x100 mm, 4 μ m). 5 μ L of purified protein was injected and the gradient run from 80 % water:TFA (99.9:0.1 v/v) and 20 % acetonitrile:water:TFA (90:9.9:0.1 v/v/v) to 20 % water:TFA (99.9:0.1 v/v) and 80 % acetonitrile:water:TFA (90:9.9:0.1 v/v/v) within 3 minutes followed by an isocratic step for another 3 min. Flow rate was 0.5 mL/min and the column compartment temperature was 50 °C.



M + 2.61 Da (Calc mass 15138.39 Da).

The spectrum was recorded with a 6545XT AdvanceBio LC/Q-TOF (Agilent Technologies) and a MabPac RP column (42.1x50 mm, 4 μ m, Thermo Scientific). 5 μ L of purified protein was injected and the gradient run from 85 % water:FA (99.9:0.1 v/v) and 15 % acetonitrile:FA (90:9.9:0.1 v/v/v) to 55 % water:FA (99.9:0.1 v/v) and 45 % acetonitrile:FA (90:9.9:0.1 v/v/v) within 3 minutes followed by an isocratic step for another 2.5 min. Flow rate was 0.4 mL/min and the column compartment temperature was 60 °C. Data was analysed and deconvoluted using the Bioconfirm software (Agilent Technologies).

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