abcam

Product datasheet

Recombinant human IL-12 protein ab89013

3 Images

Description

Product name Recombinant human IL-12 protein

Biological activity

Activity was measured by its ability to stimulate the proliferation of PHA-activated human T-

lymphoblasts, and is typically in the range of 0.05-0.20 ng/ml.

Purity > 95 % SDS-PAGE.

Expression system HEK 293 cells

Protein length Full length protein

Animal free No

Nature Recombinant

Species Human

Sequence Theoretical Sequence Alpha Chain:

 ${\tt RNLPVATPDPGMFPCLHHSQNLLRAVSNMLQKARQTLEF}$

YPC TSEEIDHE

DITKDKTSTVEACLPLELTKNESCLNSRETSFITNGSCLA

SRKTSFMMAL

CLSSIYEDLKMYQVEFKTMNAKLLMDPKRQIFLDQNML

AVIDELMQALNF

NSETVPQKSSLEEPDFYKTKIKLCILLHAFRIRAVT

IDRVMSYLNAS Beta Chain:

WELKKDVYVVELDWYPDAPGEMVVLTCDTPEEDGITWT

LDQ SSEVLGSG

KTLTIQVKEFGDAGQYTCHKGGEVLSHSLLLLHKKEDGIW

STDILKDQKE

PKNKTFLRCEAKNYSGRFTCWWLTTISTDLTFSVKSSR

GSSDPQGVTCGA

ATLSAERVRGDNKEYEYSVECQEDSACPAAEESLPI

EVMVDAVHKLKYEN

YTSSFFIRDIIKPDPPKNLQLKPLKNSRQVEVSW

EYPDTWSTPHSYFSLT

FCVQVQGKSKREKKDRVFTDKTSATVICRKNA

SISVRAQDRYYSSSWSEW ASVPCS

Specifications

1

Our **Abpromise guarantee** covers the use of **ab89013** 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. After reconstitution store at -20°C. Avoid freeze / thaw cycles.

Constituents: 1% Human serum albumin. 10% Trehalose

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

Reconstitution It is recommended that 0.5 ml of sterile phosphate-buffered saline be added to the vial. Following

reconstitution short-term storage at 4°C is recommended, and longer-term storage of aliquots at -

18 to -20°C. Repeated freeze thawing is not recommended.

General Info

Function Cytokine that can act as a growth factor for activated T and NK cells, enhance the lytic activity of

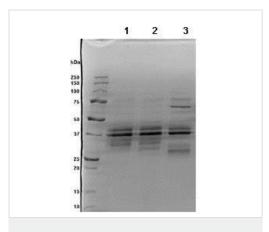
NK/lymphokine-activated Killer cells, and stimulate the production of IFN-gamma by resting

PBMC.

Sequence similarities Belongs to the IL-6 superfamily.

Cellular localization Secreted.

Images



SDS-PAGE - Recombinant human IL-12 protein (ab89013)

1D SDS-PAGE of ab89013 before and after treatment with glycosidases to remove oligosaccharides.

Lane 1: ab89013

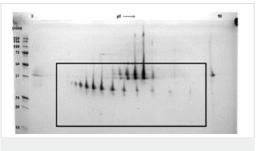
Lane 2: ab89013 treated with PNGase F to remove potential N-

linked glycans

Lane 3: ab89013 treated with a glycosidase cocktail to remove

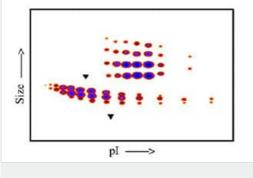
potential N- and O-linked glycans.

Appearance of additional band at lower MWt after treatment with PNGase F indicates the presence of N-linked glycans. The subsequent drop in MWt after treatment with a glycosidase cocktail indicates the presence of O-linked glycans. Additional high MWt bands in lane 3 are glycosidase enzymes.



SDS-PAGE - Recombinant human IL-12 protein (ab89013)

A sample of ab89013 without carrier protein was reduced and alkylated and focused on a 3-10 IPG strip then run on a 4-20% Tris-HCI 2D gel. 40 μ g of protein was loaded. Spot trains indicate presence of multiple isoforms.



Functional Studies - Recombinant human IL-12 protein (ab89013)

Densitometry of protein isoforms visualised by 2-DE.

The densitometry scan demonstrates the purified human cell expressed protein exists in multiple isoforms, which differ according to their level of post-translational modification.

The triangles indicate theoretical pl and MWt of the alpha and beta chains of the protein.

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 https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

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