# abcam

# Product datasheet

# Recombinant human IL-12 protein ab89013

# 画像数3

#### 製品の詳細

製品名 Recombinant human IL-12 protein

生理活性 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.

**精製度** > 95 % SDS-PAGE.

発現系 HEK 293 cells

タンパク質長 Full length protein

Animal free No.

由来 Recombinant

生物種 Human

配列 Theoretical Sequence Alpha Chain:

RNLPVATPDPGMFPCLHHSQNLLRAVSNMLQKARQTLEFYPC

TSEEIDHE

DITKDKTSTVEACLPLELTKNESCLNSRETSFITNGSCLA

SRKTSFMMAL

 ${\tt CLSSIYEDLKMYQVEFKTMNAKLLMDPKRQIFLDQNML}$ 

AVIDELMQALNF

NSETVPQKSSLEEPDFYKTKIKLCILLHAFRIRAVT

IDRVMSYLNAS Beta Chain:

IWELKKDVYVVELDWYPDAPGEMVVLTCDTPEEDGITWTLDQ

SSEVLGSG

KTLTIQVKEFGDAGQYTCHKGGEVLSHSLLLLHKKEDGIW

STDILKDQKE

PKNKTFLRCEAKNYSGRFTCWWLTTISTDLTFSVKSSR

**GSSDPQGVTCGA** 

ATLSAERVRGDNKEYEYSVECQEDSACPAAEESLPI

**EVMVDAVHKLKYEN** 

YTSSFFIRDIIKPDPPKNLQLKPLKNSRQVEVSW

EYPDTWSTPHSYFSLT

FCVQVQGKSKREKKDRVFTDKTSATVICRKNA

SISVRAQDRYYSSSWSEW ASVPCS

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.

アプリケーション Functional Studies

SDS-PAGE

製品の状態 Lyophilized

#### 前処理および保存

保存方法および安定性 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.

再構成 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.

### 関連情報

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

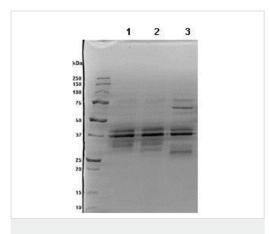
NK/lymphokine-activated Killer cells, and stimulate the production of IFN-gamma by resting

PBMC.

配列類似性 Belongs to the IL-6 superfamily.

細胞内局在 Secreted.

## 画像



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

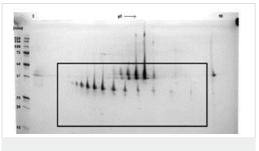
Lane 2: ab89013 treated with PNGase F to remove potential N-

linked glycans

Lane 3: ab89013 treated with a glycosidase cocktail to remove

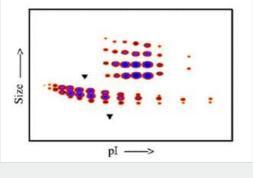
potential N- and O-linked glycans.

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  $\mu$ 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"

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