Datasheet for ABIN1047232

IL12B Protein (AA 23-328, full length) (GST tag)

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Overview

Quantity:	100 µg
Target:	IL12B
Protein Characteristics:	AA 23-328, full length
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This IL12B protein is labelled with GST tag.
Application:	ELISA

Product Details

Sequence:	IWELKKDVYV VELDWYPDAP GEMVVLTCDT PEEDGITWTL DQSSEVLGSG KTLTIQVKEF GDAGQYTCHK GGEVLSHSLL LLHKKEDGIW STDILKDQKE PKNKTFLRCE AKNYSGRFTC WWLTTISTDL TFSVKSSRGS SDPQGVTCGA ATLSAERVRG DNKEYEYSVE CQEDSACPAA EESLPIEVMV DAVHKLKYEN YTSSFFIRDI IKPDPPKNLQ LKPLKNSRQV EVSWEYPDTW STPHSYFSLT FCVQVQGKSK REKKDRVFTD KTSATVICRK NASISVRAQD RYYSSSWSEW ASVPCS
Characteristics:	Please inquire if you are interested in this recombinant protein expressed in E. coli, mammalien cells or by baculovirus infection. Be aware about differences in price and lead time.
Purity:	90 %

Target Details

Target:	IL12B
Alternative Name:	Interleukin-12 subunit beta protein (IL12B Products)
Background:	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. Ref.12 Associates with IL23A to form the IL-23 interleukin, an heterodimeric cytokine which functions in innate and adaptive immunity. IL-23 may constitute with IL-17 an acute response to infection in peripheral tissues. IL-23 binds to an heterodimeric receptor complex composed of IL12RB1 and IL23R, activates the Jak-Stat signaling cascade, stimulates memory rather than naive T-cells and promotes production of proinflammatory cytokines. IL-23 induces autoimmune inflammation and thus may be responsible for autoimmune inflammatory diseases and may be important for tumorigenesis.
Molecular Weight:	62.1 kD
UniProt:	P29460
Pathways:	JAK-STAT Signaling, Cellular Response to Molecule of Bacterial Origin, Regulation of Leukocyte Mediated Immunity, Positive Regulation of Immune Effector Process, Activated T Cell Proliferation

Application Details

Comment:	The yeast protein expression system is the most economical and efficient eukaryotic system for secretion and intracellular expression. A protein expressed by the mammalian cell system is of very high-quality and close to the natural protein. But the low expression level, the high cost of medium and the culture conditions restrict the promotion of mammalian cell expression systems. The yeast protein expression system serve as a eukaryotic system integrate the advantages of the mammalian cell expression system. A protein expressed by yeast system could be modificated such as glycosylation, acylation, phosphorylation and so on to ensure the native protein conformation. It can be used to produce protein material with high added value that is very close to the natural protein. Our proteins produced by yeast expression system has been used as raw materials for downstream preparation of monoclonal antibodies.
Restrictions:	For Research Use only

Handling

Format:	Lyophilized

Handling

Concentration:	0.2-2 mg/mL
Buffer:	Tris-based buffer, 50 % glycerol
Handling Advice:	Repeated freezing and thawing is not recommended. Store working aliquots at 4 °C for up to one week
Storage:	-20 °C
Storage Comment:	Store at -20 °C for extended storage, conserve at -20 °C or -80 °C

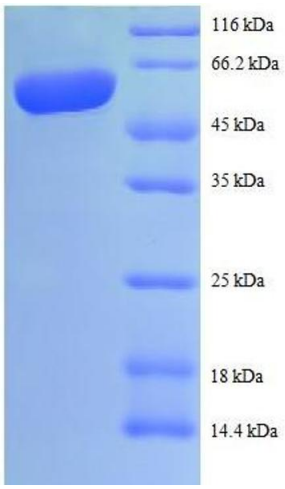
Publications

Product cited in:

Huang, Cancilla, Morahan: "Complete primary structure, chromosomal localisation, and definition of polymorphisms of the gene encoding the human interleukin-12 p40 subunit." in: **Genes and immunity**, Vol. 1, Issue 8, pp. 515-20, (2001) (PubMed).

Wolf, Temple, Kobayashi, Young, Dicig, Lowe, Dzialo, Fitz, Ferenz, Hewick: "Cloning of cDNA for natural killer cell stimulatory factor, a heterodimeric cytokine with multiple biologic effects on T and natural killer cells." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 146, Issue 9, pp. 3074-81, (1991) (PubMed).

Gubler, Chua, Schoenhaut, Dwyer, McComas, Motyka, Nabavi, Wolitzky, Quinn, Familletti: " Coexpression of two distinct genes is required to generate secreted bioactive cytotoxic lymphocyte maturation factor." in: **Proceedings of the National Academy of Sciences of the United States of America**, Vol. 88, Issue 10, pp. 4143-7, (1991) (PubMed).



SDS-PAGE

Image 1. Interleukin 12b (IL12B) (AA 23-328), (full length) protein (GST tag)