

## Product datasheet

# Recombinant mouse IL-12 p40 protein (Active) ab224779

### Description

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<b>Product name</b>	Recombinant mouse IL-12 p40 protein (Active)
<b>Biological activity</b>	Determined by its ability to inhibit the proliferative effect of 2 ng/ml mL-12p70 in T-cell enriched PBMCs.
<b>Purity</b>	> 95 % SDS-PAGE. Purity is greater than 95% by SDS-PAGE gel and HPLC analyses.
<b>Expression system</b>	HEK 293 cells
<b>Accession</b>	<b><u>P43432</u></b>
<b>Protein length</b>	Full length protein
<b>Animal free</b>	No
<b>Nature</b>	Recombinant
<b>Species</b>	Mouse
<b>Sequence</b>	MWELEKDVYVVEVDWTPDAPGETVNLTCDTPEEDDITWT SDQRHGVIGSG KTLTITVKEFLDAGQYTCHKGGETLSHSHLLLHKKENGWS TEILKNFKN KTFLKCEAPNYSGRFTCSWLVRNMDLKFNIKSSSSSPD SRAVTCGMASL SAEKVTLDQRDYEKYSVSCQEDVTCPTAEETLPIELALEA RQQNKYENYS TSFFIRDIIKPDPPKNLQMKPLKNSQVEVSWEYPDSWSTP HSYFSLKFFV RIQRKKEKMKETEEGCNQGAFLEKTSTEVQCKGGNVC VQAQDRYNNSS CSKWACVPCRVR
<b>Predicted molecular weight</b>	36 kDa
<b>Amino acids</b>	23 to 335
<b>Additional sequence information</b>	Full length mature chain without signal peptide.

### Specifications

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Our **Abpromise guarantee** covers the use of **ab224779** in the following tested applications.

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

<b>Applications</b>	SDS-PAGE HPLC Functional Studies
<b>Form</b>	Lyophilized
<b>Preparation and Storage</b>	
<b>Stability and Storage</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.  This product is an active protein and may elicit a biological response in vivo, handle with caution.
<b>Reconstitution</b>	For lot specific reconstitution information please contact our Scientific Support Team.
<b>General Info</b>	
<b>Function</b>	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.  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.
<b>Involvement in disease</b>	Defects in IL12B are a cause of mendelian susceptibility to mycobacterial disease (MSMD) [MIM:209950]; also known as familial disseminated atypical mycobacterial infection. This rare condition confers predisposition to illness caused by moderately virulent mycobacterial species, such as Bacillus Calmette-Guerin (BCG) vaccine and environmental non-tuberculous mycobacteria, and by the more virulent Mycobacterium tuberculosis. Other microorganisms rarely cause severe clinical disease in individuals with susceptibility to mycobacterial infections, with the exception of Salmonella which infects less than 50% of these individuals. The pathogenic mechanism underlying MSMD is the impairment of interferon-gamma mediated immunity, whose severity determines the clinical outcome. Some patients die of overwhelming mycobacterial disease with lepromatous-like lesions in early childhood, whereas others develop, later in life, disseminated but curable infections with tuberculoid granulomas. MSMD is a genetically heterogeneous disease with autosomal recessive, autosomal dominant or X-linked inheritance. Genetic variations in IL12B are a cause of susceptibility to psoriasis type 11 (PSORS11) [MIM:612599]. Psoriasis is a common, chronic inflammatory disease of the skin with multifactorial etiology. It is characterized by red, scaly plaques usually found on the scalp, elbows and knees. These lesions are caused by abnormal keratinocyte proliferation and infiltration of inflammatory cells into the dermis and epidermis.
<b>Sequence similarities</b>	Belongs to the type I cytokine receptor family. Type 3 subfamily. Contains 1 fibronectin type-III domain. Contains 1 Ig-like C2-type (immunoglobulin-like) domain.
<b>Post-translational modifications</b>	Known to be C-mannosylated in the recombinant protein; it is not yet known for sure if the wild-type protein is also modified.
<b>Cellular localization</b>	Secreted.

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

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- 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**

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