

Product datasheet

Recombinant Human IL-12 p40 protein ab52147

1 Image

Description

Product name	Recombinant Human IL-12 p40 protein
Purity	> 95 % SDS-PAGE.
Expression system	Escherichia coli
Protein length	Protein fragment
Animal free	No
Nature	Recombinant
Species	Human
Amino acids	23 to 328

Specifications

Our [Abpromise guarantee](#) covers the use of **ab52147** in the following tested applications.

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

Applications	SDS-PAGE
Form	Liquid

Preparation and Storage

Stability and Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.316% Tris HCl, 50% Glycerol
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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. 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
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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.

Involvement in disease

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.

Sequence similarities

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.

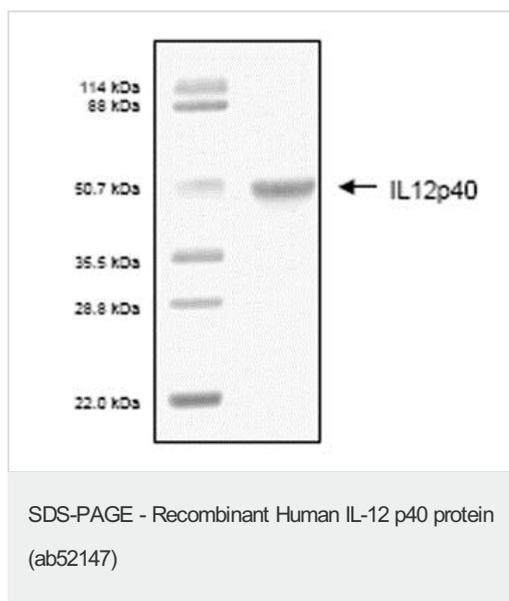
Post-translational modifications

Known to be C-mannosylated in the recombinant protein; it is not yet known for sure if the wild-type protein is also modified.

Cellular localization

Secreted.

Images



ab52147 on SDS-PAGE with markers.

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