

### Anti-IL-12 (IL-12a & IL-12b) Reference Antibody (briakinumab)

Recombinant Antibody Catalog # APR10466

#### **Specification**

## Anti-IL-12 (IL-12a & IL-12b) Reference Antibody (briakinumab) - Product Information

Application Primary Accession Reactivity Clonality

Isotype

Calculated MW

FC, E, FTA P29459

Cynomolgus, Human

Monoclonal

IqG1

143.86 KDa

# Anti-IL-12 (IL-12a & IL-12b) Reference Antibody (briakinumab) - Additional Information

**Target/Specificity** 

IL-12

**Endotoxin** 

< 0.001EU/ µg, determined by LAL method.

**Conjugation** Unconjugated

**Expression system** 

CHO Cell

## **Format**

Purified monoclonal antibody supplied in PBS, pH6.0, without preservative. This antibody is purified through a protein A column.

### Anti-IL-12 (IL-12a & IL-12b) Reference Antibody (briakinumab) - Protein Information

Name IL12A

Synonyms NKSF1

#### **Function**

Heterodimerizes with IL12B to form the IL-12 cytokine or with EBI3/IL27B to form the IL-35 cytokine (PubMed:<a href="http://www.uniprot.org/citations/8605935"

target="\_blank">8605935</a>, PubMed:<a href="http://www.uniprot.org/citations/8943050" target="\_blank">8943050</a>). IL-12 is primarily produced by professional antigen-presenting cells (APCs) such as B-cells and dendritic cells (DCs) as well as macrophages and granulocytes and regulates T-cell and natural killer-cell responses, induces the production of interferon-gamma (IFN-gamma), favors the differentiation of T-helper 1 (Th1) cells and is an important link between innate resistance and adaptive immunity (PubMed:<a

href="http://www.uniprot.org/citations/1673147" target="\_blank">1673147</a>, PubMed:<a href="http://www.uniprot.org/citations/1674604" target="\_blank">1674604</a>, PubMed:<a



href="http://www.uniprot.org/citations/8605935" target="\_blank">8605935</a>). Mechanistically, exerts its biological effects through a receptor composed of IL12R1 and IL12R2 subunits (PubMed:<a href="http://www.uniprot.org/citations/8943050" target="\_blank">8943050</a>). Binding to the receptor results in the rapid tyrosine phosphorylation of a number of cellular substrates including the JAK family kinases TYK2 and JAK2 (PubMed:<a href="http://www.uniprot.org/citations/7528775" target="\_blank">7528775</a>). In turn, recruited STAT4 gets phosphorylated and translocates to the nucleus where it regulates cytokine/growth factor responsive genes (PubMed:<a href="http://www.uniprot.org/citations/7638186" target="\_blank">7638186</a>). As part of IL-35, plays essential roles in maintaining the immune homeostasis of the liver microenvironment and functions also as an immune-suppressive cytokine (By similarity). Mediates biological events through unconventional receptors composed of IL12RB2 and gp130/IL6ST heterodimers or homodimers (PubMed:<a href="http://www.uniprot.org/citations/22306691" target="\_blank">22306691</a>(a). Signaling requires the transcription factors STAT1 and STAT4, which form a unique heterodimer that binds to distinct DNA sites (PubMed:<a

Cellular Location Secreted

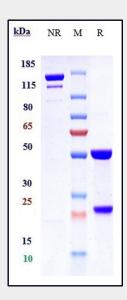
#### Anti-IL-12 (IL-12a & IL-12b) Reference Antibody (briakinumab) - Protocols

Provided below are standard protocols that you may find useful for product applications.

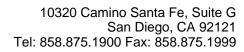
href="http://www.uniprot.org/citations/22306691" target=" blank">22306691</a>).

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

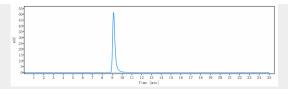
## Anti-IL-12 (IL-12a & IL-12b) Reference Antibody (briakinumab) - Images



Anti-IL-12 (IL-12a & IL-12b) Reference Antibody (briakinumab) on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%







The purity of Anti-IL-12 (IL-12a & IL-12b) Reference Antibody (briakinumab)is more than 95% ,determined by SEC-HPLC.