



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

Recombinant Antibody Catalog # APR10466

Product Information

Application FC, Kinetics, Animal Model

Primary Accession
Reactivity
Human
Clonality
Monoclonal
Isotype
IgG1
Calculated MW
24874

Additional Information

Target/Specificity IL-12

Endotoxin

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.

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:<u>8605935</u>, PubMed:<u>8943050</u>). 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:<u>1673147</u>, PubMed:<u>1674604</u>, PubMed:<u>8605935</u>).

Mechanistically, exerts its biological effects through a receptor composed of IL12R1 and IL12R2 subunits (PubMed:8943050). 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:<u>7528775</u>). In turn, recruited STAT4 gets phosphorylated and translocates to the nucleus

where it regulates cytokine/growth factor responsive genes

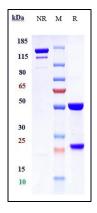
(PubMed: 7638186). As part of IL-35, plays essential roles in maintaining the

immune homeostasis of the liver microenvironment and also functions as an immune-suppressive cytokine (By similarity). Mediates biological events through unconventional receptors composed of IL12RB2 and gp130/IL6ST heterodimers or homodimers (PubMed:22306691). Signaling requires the transcription factors STAT1 and STAT4, which form a unique heterodimer that binds to distinct DNA sites (PubMed:22306691).

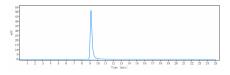
Cellular Location

Secreted

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.