

Datasheet for ABIN5505695 **IL12A Protein**



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Overview

Quantity:	10 µg
Target:	IL12A
Origin:	Human
Source:	Insect Cells
Protein Type:	Recombinant
Biological Activity:	Active
Application:	Functional Studies (Func), Antibody Production (AbP), Standard (STD), Protein Interaction (PI)

Product Details

Specificity:	Optimal preservation of protein structure, post-translational modifications and functions.
Characteristics:	• Recombinant human Interleukin-12 alpha / IL12A protein expressed in Insect cells. • Produced with end-sequenced ORF clone • Tested for bioactivity.
Purity:	95 % , as determined by Coomassie stained SDS-PAGE.
Endotoxin Level:	Less than 0.01 ng per µg protein as determined by the LAL method.
Biological Activity Comment:	The ED50 is 0.05 - 0.25 ng/ml, corresponding to a specific activity of 0.4 - 2.0 x 10 ⁷ units/mg, determined by the production of IFN&gamma by activated human PBMC in response to IL-12.

Target Details

Target:	IL12A
Alternative Name:	Interleukin-12 alpha / IL12A (IL12A Products)

Target Details

Background:	This gene encodes a subunit of a cytokine that acts on T and natural killer cells, and has a broad array of biological activities. The cytokine is a disulfide-linked heterodimer composed of the 35-kD subunit encoded by this gene, and a 40-kD subunit that is a member of the cytokine receptor family. This cytokine is required for the T-cell-independent induction of interferon (IFN)-gamma, and is important for the differentiation of both Th1 and Th2 cells. The responses of lymphocytes to this cytokine are mediated by the activator of transcription protein STAT4. Nitric oxide synthase 2A (NOS2A/NOS2) is found to be required for the signaling process of this cytokine in innate immunity.
Molecular Weight:	57 kDa
NCBI Accession:	NP_000873
Pathways:	JAK-STAT Signaling , Regulation of Leukocyte Mediated Immunity , Positive Regulation of Immune Effector Process , Activated T Cell Proliferation

Application Details

Application Notes:	Recombinant human proteins can be used for: Native antigens for optimized antibody production Positive controls in ELISA and other antibody assays Protein-protein interaction In vitro biochemical assays and cell-based functional assays
Restrictions:	For Research Use only

Handling

Concentration:	> 50 µg/mL
Buffer:	10 mM NaH ₂ PO ₄ , 150 mM NaCl, pH 7.2
Storage:	-80 °C
Storage Comment:	Store at -80°C. Thaw on ice, aliquot to individual single-use tubes, and then re-freeze immediately. Only 2-3 freeze thaw cycles are recommended.