Datasheet for ABIN7566184

IL12 Protein (AA 23-328, AA 57-253) (His tag)

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Overview

Quantity:	50 µg
Target:	IL12
Protein Characteristics:	AA 23-328, AA 57-253
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This IL12 protein is labelled with His tag.

Product Details

Purpose:	IL-12 (human) (rec.) (His)
Cross-Reactivity:	Human
Characteristics:	The human IL-12 complex composed of the p40 subunit (aa 23-328) and the p35 subunit (aa 57-253) is fused at the C-terminus through a (G3S)4 linker to a His-tag.
Purity:	>95 % (SDS-PAGE)
Sterility:	Sterile filtered
Endotoxin Level:	<0.01EU/µg protein (LAL test, Lonza).
Biological Activity Comment:	The ED50 was determined by the induction of IFN-gamma from NK cells co-stimulated with IL-18 is < 1.0 ng/ml, corresponding to a specific activity of >1 x 106units/mg.

Target Details

Target:	IL12
Alternative Name:	IL-12 (IL12 Products)
Background:	Interleukin-12, IL-12p70, IL-12p75, Cytotoxic Lymphocyte Maturation Factor, CLMF, NKSF, Natural Killer Cell Stimulatory Factor, TSF, T-cell Stimulatory Factor Interleukin-12 (IL-12), also known as Natural Killer Cell Stimulatory Factor (NKSF) or Cytotoxic Lymphocyte Maturation Factor (CLMF), is a heterodimeric pleiotropic cytokine made up of a 40 kDa (p40) subunit and a 35 kDa (p35) subunit. IL-12 is produced by macrophages and B lymphocytes and has been shown to have multiple effects on T cells and Natural Killer (NK) cells. Some of these IL-12 activities include the induction of IFN-gamma and TNF in resting and activated T and NK cells, the enhancement of cytotoxic activity of resting NK and T cells, the stimulation of resting T cell proliferation in the presence of a comitogen, and the enhancement of NK cell proliferation. Current evidence indicates that IL-12 is a key mediator of cellular immunity and induces the differentiation of Th1 cells from precursor T helper cells. Based on its activities, it has been suggested that IL-12 may have therapeutic potential as a vaccine adjuvant that promotes cellular immunity and as an antitumor and anti viral agent.
Molecular Weight:	~85kDa (SDS-PAGE)
NCBI Accession:	NP_000873
Pathways:	JAK-STAT Signaling, TLR Signaling, Cellular Response to Molecule of Bacterial Origin, Regulation of Leukocyte Mediated Immunity, Positive Regulation of Immune Effector Process, Activated T Cell Proliferation, Cancer Immune Checkpoints, Inflammasome

Application Details

Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Buffer:	Lyophilized from 0.2μm-filtered solution in PBS.
Handling Advice:	Avoid freeze/thaw cycles.Centrifuge lyophilized vial before opening and reconstitution.PBS containing at least 0.1 % BSA should be used for further dilutions.
Storage:	4 °C,-20 °C
Storage Comment:	Short Term Storage: +4°C Long Term Storage: -20°C

Handling

Use & Stability: Stable for at least 1 year after receipt when stored at -20°C. Working aliquots are stable for up to 3 months when stored at -20°C.