

Datasheet for ABIN4986930
IL12 ELISA Kit



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1 Image

Overview

Quantity:	96 tests
Target:	IL12
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	31.25-2000 pg/mL
Minimum Detection Limit:	31.25 pg/mL
Application:	ELISA

Product Details

Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (citrate), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Specificity:	Natural and recombinant Human IL-12p70 Ligand
Sensitivity:	7 pg/mL
Material not included:	• Microplate reader. • Pipettes and pipette tips. • EP tube Deionized or distilled water.

Target Details

Target:	IL12
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Target Details

Alternative Name: IL-12p70 ([IL12 Products](#))

Background: IL-12, also known as natural killer cell stimulatory factor (NKSF) or cytotoxic lymphocyte maturation factor (CLMF), is a pleiotropic cytokine produced primarily by antigen-presenting cells (monocytes/macrophages, dendritic cells and B lymphocytes). IL-12 has multiple effects on T lymphocytes and natural killer (NK) cells, including the ability to stimulate cytotoxicity, proliferation, cytokine production and Th1 subset development (1, 2). IL-12 is a disulfide-linked, 70 kDa (p70) heterodimeric glycoprotein composed of a 40 kDa (p40) subunit and a 35 kDa (p35) subunit. The p40 and p35 subunits by themselves do not have IL-12 activity, but the homodimer of p40 has been shown to bind the IL-12 receptor and is an IL-12 antagonist (3, 4). The genes for human p40 and p35, found on chromosomes 5 and 3, respectively, are independently regulated (1, 5). The expression of p35 mRNA has been found to be nearly ubiquitous. However, p35 subunits have not been detected in culture supernates of cells expressing only p35 or both p35 and p40 mRNAs (1). In cells expressing both p35 and p40 mRNAs, p40 mRNA is expressed to a higher level and free p40 subunits not associated with p35 subunits are secreted together with heterodimeric IL-12p70 (6). In the culture supernates of various activated human monocytes where free p40 is present in vast excess over p70, the levels of p70 measured by bioassays are consistent with those measured using a p70-specific immunoassay, suggesting that p40 monomers are not efficient IL-12 antagonists (1, 7). Currently, the physiological role of free p40 subunits is not clear.

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

Application Notes: Detection Wavelength: 450 nm

Sample Volume: 20 µL

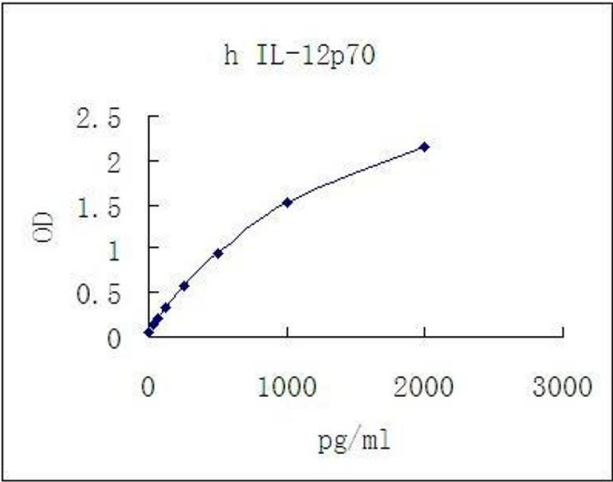
Assay Time: 3 h

Plate: Pre-coated

Restrictions: For Research Use only

Handling

Storage: 4 °C



ELISA

Image 1.