

Datasheet for ABIN4986931

IL12 ELISA Kit





Overview

Quantity:	96 tests
Target:	IL12
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Detection Range:	0.02-1.0 ng/mL
Minimum Detection Limit:	0.02 ng/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 Mouse IL-12p70 Ligand	
Sensitivity:	7 pg/mL	
Material not included:	Microplate reader.Pipettes and pipette tips.	

Target Details

Target:	IL12	

• EP tube Deionized or distilled water.

Target Details

Alternative Name:

IL-12p70 (IL12 Products)

Background:

Interleukin 12 (IL-12), also known as natural killer cell stimulatory factor (NKSF) or cytotoxic lymphocyte maturation factor (CLMF), is a pleiotropic cytokine originally identified in the medium of a human B-lymphoblastoid cell line (1-3). Biologically active mouse IL-12 is a disulfide-linked, 70 kDa (p70) heterodimeric glycoprotein composed of a 40 kDa (p40) subunit and a 35 kDa (p35) subunit. While the p40 and p35 subunits by themselves do not have IL-12 activity, the p40 homodimer has been shown to bind the IL-12 receptor and is an IL-12 antagonist (4, 5). Mature mouse p35 subunit is composed of 193 amino acid (aa) residues and contains seven cysteines plus one potential N-linked glycosylation site (6). Mature mouse p40 subunit has 313 aa, with 13 cysteines and five potential N-linked glycosylation sites (6). Mouse p35 and p40 subunits show 63 % and 72 % aa identity, respectively, to the human p35 and p40 subunits (3, 6). Although mouse IL-12 is active on both human and mouse cells, human IL-12 is only active on human cells. IL-12 has been shown to have multiple effects on T lymphocytes and natural killer (NK) cells. Some of these effects include the induction of IFN-y and TNF production by T and NK cells, the enhancement of cytotoxic activity of T and NK cells and the stimulation of T and NK cell proliferation. IL-12 has also been shown to be a central mediator of the cell-mediated immune response by promoting Th1 development (7-11). Cell surface staining for IL-12 on a human monocytic and a mouse macrophage cell line has been reported, suggesting that membrane-associated IL-12 may exist (12). Cells known to produce IL-12 include macrophages, dendritic cells, monocytes, Langerhans cells, neutrophils, and keratinocytes. Although a human B cell line has been shown to produce IL-12(2), fresh B cells are apparently not producers of IL-12.

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

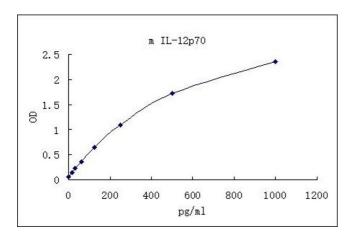
Application Details

Application Notes:	Detection Wavelength: 450 nm	
Sample Volume:	20 μL	
Assay Time:	3 h	
Plate:	Pre-coated	
Restrictions:	For Research Use only	

Storage:

4°C

Images



ELISA

Image 1.