

Rat Interleukin 12, IL-12/P70 ELISA Kit | IL-12/P70 elisa kit

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CATALOG #
AAA80769

REACTIVITY
Rat

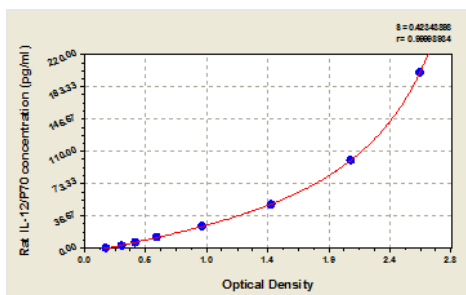
PRODUCT SYNONYMS

Interleukin 12; IL-12/P70; Rat Interleukin 12; IL-12/P70 ELISA Kit; IL-12/P70 ELISA KIT; IL-12/P70 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Rat
Sequence Length	253
Samples	Serum, plasma, tissue homogenates
Detection Range	3.12 pg/ml-200 pg/ml
Sensitivity	0.78 pg/ml
Detection Wavelength	450 nm
Sample Volume	50-100ul
Preparation and Storage	Unopened test kits should be stored at 2 to 8 degree C upon receipt. Please refer to pdf manual for further storage instructions.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for IL-12/P70 elisa kit	Introduction: Interleukin 12 (IL-12) is an interleukin that is naturally produced by dendritic cells, macrophages and human B-lymphoblastoid cells (NC-37) in response to antigenic stimulation. IL-12 is composed of a bundle of four alpha helices. It is a heterodimeric cytokine encoded by two separate genes, IL-12A (p35) and IL-12B (p40). The active heterodimer, and a homodimer of p40 are formed following protein synthesis. IL-12 is involved in the differentiation of naive T cells into Th1 cells, which is important in resistance against pathogens. It is known as a T cell stimulating factor, which can stimulate the growth and function of T cells. It stimulates the production of interferon-gamma (IFN-gamma) and tumor necrosis factor-alpha (TNF-alpha) from T and natural killer (NK) cells, and reduces IL-4 mediated suppression of IFN-gamma. T cells which produce IL-12 have a coreceptor, CD30, which is associated with IL-12 activity. IL-12 plays an important role in the activities of natural killer cells and T lymphocytes. IL-12 mediates enhancement of the cytotoxic activity of NK cells and CD8+ cytotoxic T lymphocytes. There also seems to be a link between IL-2 and the signal transduction of IL-12 in NK cells. IL-2 stimulates the expression of two IL-12 receptors, IL-12R-beta1 and IL-12R-beta2, maintaining the expression of a critical protein involved in IL-12 signaling in NK cells. Enhanced functional response is demonstrated by IFN-gamma production and killing of target cells. IL-12 also has anti-angiogenic activity, which means it can block the formation of new blood vessels. It does this by increasing production of interferon gamma, which in turn increases the production of a chemokine called inducible protein-10 (IP-10 or CXCL10). IP-10 then mediates this anti-angiogenic effect. Because of its ability to induce immune responses and its anti-angiogenic activity, there has been an interest in testing IL-12 as a possible anti-cancer drug. However, it has not been shown to have substantial activity in the tumors tested to this date. There is a link that may be useful in treatment between IL-12 and the diseases psoriasis and inflammatory bowel disease. Principle of the Assay: The microtiter plate provided in this kit has been pre-coated with an antibody specific to IL-12/P70. Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody preparation specific for IL-12/P70 and Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. Then a TMB (3,3',5,5' tetramethyl-benzidine) substrate solution is added to each well. Only those wells that contain IL-12/P70, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of a sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450 nm +/- 2 nm. The concentration of IL-12/P70 in the samples is then determined by comparing the O.D. of the samples to the standard curve.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	4323579
NCBI GeneID	3592
UniProt Accession #	P29459; Q96QZ1
Molecular Weight	24,874 Da
NCBI Official Full Name	interleukin 12
NCBI Official Synonym Full Names	interleukin 12A
NCBI Official Symbol	IL12A
NCBI Official Synonym Symbols	P35; CLMF; NFSK; NKSF1; IL-12A
NCBI Protein Information	interleukin-12 subunit alpha; CLMF p35; IL35 subunit; IL-12, subunit p35; interleukin 12, p35; interleukin-12 alpha chain; NF cell stimulatory factor chain 1; NK cell stimulatory factor chain 1; cytotoxic lymphocyte maturation factor 1, p35; cytotoxic lymphocyte maturation factor 35 kDa subunit; interleukin 12A (natural killer cell stimulatory factor 1, cytotoxic lymphocyte maturation factor 1, p35)
UniProt Protein Name	Interleukin-12 subunit alpha
UniProt Gene Name	IL12A
UniProt Synonym Gene Names	NKSF1; IL-12A; CLMF p35; NKSF1
UniProt Entry Name	IL12A_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

