

Human interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte maturation factor 2, p40) ELISA Kit | IL12B elisa kit

Human Interleukin 12, IL-12/P40 ELISA Kit

CATALOG #

AAA80436

REACTIVITY

Human

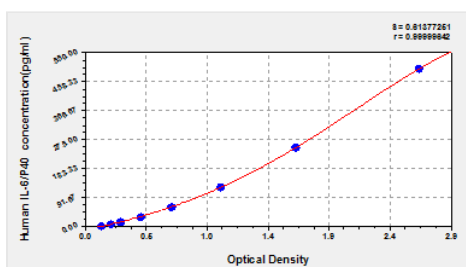
PRODUCT SYNONYMS

interleukin 12B (natural killer cell stimulatory factor 2; cytotoxic lymphocyte maturation factor 2; p40); Human Interleukin 12; IL-12/P40 ELISA Kit; IL-12/P40 ELISA KIT; CLMF; CLMF2; IL-12B; NKSF; NKSF2; IL12; subunit p40; interleukin 12; p40; interleukin 12B; interleukin-12 beta chain; natural killer cell stimulatory factor; 40 kD subunit; IL12B elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	This assay has high sensitivity and excellent specificity for detection of Human IL12B. No significant cross-reactivity or interference between Human IL12B and analogues was observed.
Sequence Length	328
Samples	Serum, plasma, cell culture supernates, urine and tissue homogenates
Detection Range	7.8pg/ml-500 pg/ml
Sensitivity	1.95 pg/ml
Intra-assay Precision	Intra-assay Precision (Precision within an assay): CV% is less than 8% Three samples of known concentration were tested twenty times on one plate to assess. Inter-assay Precision (Precision between assays): CV% is less than 10% Three samples of known concentration were tested in twenty assays to assess.
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 IL12B elisa kit	Introduction: Interleukin 12 (IL-12) is an interleukin that is naturally produced by 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. 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. Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody preparation specific for IL-12 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, 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 in the samples is then determined by comparing the O.D. of the samples to the standard curve.
---	---

NCBI AND UNIPROT INFORMATION

NCBI GI #	24497438
NCBI GeneID	3593
NCBI Accession #	NP_002178.2
NCBI GenBank Nucleotide #	NM_002187.2
UniProt Accession #	P29460
Molecular Weight	37,169 Da
NCBI Official Full Name	interleukin-12 subunit beta
NCBI Official Synonym Full Names	interleukin 12B
NCBI Official Symbol	IL12B
NCBI Official Synonym Symbols	CLMF; NKSF; CLMF2; NKSF2; IL-12B
NCBI Protein Information	interleukin-12 subunit beta; CLMF p40; IL-12 subunit p40; IL12, subunit p40; interleukin 12, p40; interleukin-12 beta chain; NK cell stimulatory factor chain 2; cytotoxic lymphocyte maturation factor 40 kDa subunit; natural killer cell stimulatory factor, 40 kD subunit; interleukin 12B (natural killer cell stimulatory factor 2, cytotoxic lymphocyte maturation factor 2, p40)
UniProt Protein Name	Interleukin-12 subunit beta
UniProt Gene Name	IL12B
UniProt Synonym Gene Names	NKSF2; IL-12B; CLMF p40; NKSF2
UniProt Entry Name	IL12B_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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/il12b-human-elisa-kits/interleukin-12b-natural-killer-cell-stimulatory-factor-2-cytotoxic-lymphocyte-maturation-factor-2-p40/80436>