

Rat IL-10 ELISA Kit | IL-10 elisa kit

Rat IL-10 ELISA KIT

CATALOG #
AAA309916

REACTIVITY
Rat

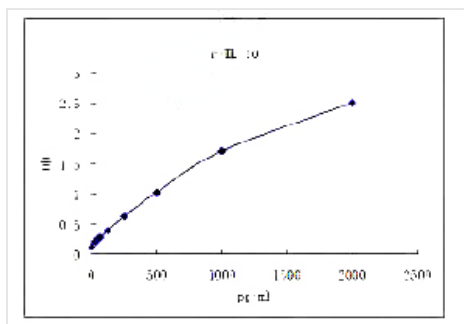
PRODUCT SYNONYMS

IL-10; Rat IL-10 ELISA KIT; Rat IL-10; IL-10 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Rat
Specificity	This assay recognizes both natural and recombinant rat IL-10. The factors listed below were prepared at 50ng/ml in Standard /sample Diluent and assayed for cross-reactivity and no significant cross- reactivity or interference was observed.
Samples	Cell culture supernates, serum, and plasma
Assay Type	Quantitative Sandwich
Detection Range	31.25 pg/ml - 2000 pg/ml
Sensitivity	15pg/mL
Preparation and Storage	Store at 4 degree C

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for IL-10 elisa kit

Principle of the Assay: This assay employs the quantitative sandwich enzyme immunoassay technique. A monoclonal antibody specific for IL- 10 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any IL-10 present is bound by the immobilized antibody. Following incubation unbound samples are removed during a wash step, and then a detection antibody specific for IL-10 is added to the wells and binds to the combination of capture antibody-IL-10 in sample. Following a wash to remove any unbound combination, and enzyme conjugate is added to the wells. Following incubation and wash steps a substrate is added. A coloured product is formed in proportion to the amount of IL-10 present in the sample. The reaction is terminated by addition of acid and absorbance is measured at 450nm. A standard curve is prepared from seven IL-10 standard dilutions and IL-10 sample concentration determined.

Background/Introduction: Interleukin 10 (IL-10), initially designated cytokine synthesis inhibitor, is a pleiotropic cytokine that inhibits the production of a number of cytokines (including IL-1, GM-CSF, TNF, IL-6, IL-8, IL-12 and IFN-gamma) by activated Th1 cells, NK cells, and monocytes/macrophages(1-5). Rat IL-10 cDNA encodes a 178 amino acid (aa) residue precursor protein that contains an 18 aa signal sequence and a 160 aa mature protein (1, 2). Within the mature protein, there are two potential N-linked glycosylation sites and five cysteine residues. Mature rat IL-10 shares 85% and 74% aa sequence identity with mouse and human IL-10, respectively (1, 4). Although rat and human IL-10 are both active on mouse cells, mouse IL-10 is not active on human cells (4). Based on human and mouse studies, biologically active rat IL-10 is likely to be a nondisulfide-linked homodimer in solution (4). Although IL-10 is considered to be a strictly secreted cytokine, the existence of biologically-active, membrane-bound IL-10 has also been reported. IL-10 has been shown to inhibit macrophage cytotoxic activity and to stimulate the proliferation and differentiation of B cells, mast cells, and thymic T cells. IL-10 is a potent modulator of monocyte/macrophage function. IL-10 also enhances the release of soluble TNF receptors and inhibits the expression of surface ICAM- 1 and B7 (6, 7). Finally, IL-10 has been reported to suppress the synthesis of superoxide anion (8) plus reactive oxygen intermediates (ROI), and either inhibit or facilitate nitric oxide synthesis, depending on the time of exposure to activated macrophages (9). IL-10 has marked effects on B cells. IL-10 also has documented activity on endothelial cells, where it mimics IL-4 (10), and on thymocytes (11) and mast cells, where it acts as a growth costimulator (12, 13).

NCBI AND UNIPROT INFORMATION

NCBI GI #	385202765
NCBI GeneID	397106
Molecular Weight	19,934 Da
NCBI Official Full Name	IL-10, partial
NCBI Official Symbol	IL10
NCBI Official Synonym Symbols	CSIF; IL-10
NCBI Protein Information	interleukin-10
UniProt Protein Name	Interleukin-10
UniProt Gene Name	IL10
UniProt Synonym Gene Names	IL-10; CSIF

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.

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Online datasheet: <https://stage.aaabiotech.com/rat-elisa-kits/il-10/309916>