

Rat IL-4 ELISA Kit | IL-4 elisa kit

Rat IL-4 ELISA KIT

CATALOG #
AAA309914

REACTIVITY
Rat

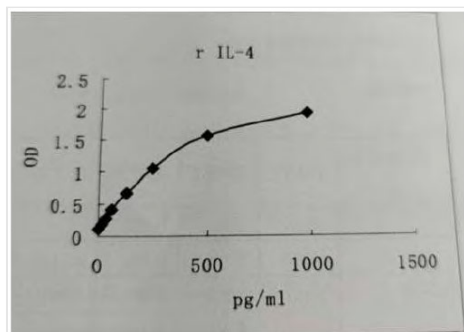
PRODUCT SYNONYMS

IL-4; Rat IL-4 ELISA KIT; Rat IL-4 ELISA KTI; IL-4 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Rat
Specificity	This assay recognizes both natural and recombinant rat IL-4. The factors listed below were prepared at 50ng/ml in Standard /sample Diluent and assayed for cross-reactivity and no significant crossreactivity or interference was observed.
Assay Type	Quantitative Sandwich
Samples	Cell culture supernates, serum, and plasma.
Sensitivity	7pg/mL
Sample Volume	20 uL
Detection Method	Colorimetric
Preparation and Storage	Store at 4 degree C

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for IL-4 elisa kit

Background: Interleukin 4 (IL-4) is a pleiotropic cytokine produced primarily by activated T lymphocytes, mast cells and basophils (1-3). The cDNA sequence of rat IL-4 predicts a 147 amino acid (aa) residue precursor protein containing a 24 aa residue signal peptide that is cleaved to generate the 123 aa residue mature protein containing four potential N-linked glycosylation sites and seven cysteine residues (4-6). Mature rat IL-4 shares 60% and 44% amino acid sequence similarity with mouse and human IL-4, respectively (5,6). IL-4 has multiple immune response-modulating activities on a variety of cell types. It is an important regulator of isotype switching, inducing IgE production in B lymphocytes. It is an important modulator of the differentiation of precursor T helper cells to the Th2 subset that mediates humoral immunity and modulates antibody production. In addition, IL-4 has also been shown to have anti-tumor activity both in vivo and in vitro (1-3). The biological effects of IL-4 are mediated by specific cell surface receptor complexes. Although IL-4 R does not bind IL-13 directly, it has been shown to complex with the low-affinity IL-13 R to form the functional high-affinity receptor complex for IL-13 (7, 8). In addition to the membrane-bound form of IL-4 R, a naturally occurring soluble form of IL-4 R has been identified in human and mouse biological fluids and in mouse cell culture supernates (9-11). Soluble IL-4 R has been shown to bind IL-4 with high affinity in solution.

Principle of the Assay: This assay employs the quantitative sandwich enzyme immunoassay technique. A monoclonal antibody specific for IL-4 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any IL-4 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-4 is added to the wells and binds to the combination of capture antibody-IL-4 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-4 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-4 standard dilutions and IL-4 sample concentration determined.

NCBI AND UNIPROT INFORMATION

NCBI GI #	21264449
NCBI GeneID	443327
UniProt Accession #	P30368; Q95MZ6
Molecular Weight	15,136 Da
NCBI Official Full Name	Interleukin-4
NCBI Official Symbol	IL4
NCBI Official Synonym Symbols	IL-4
NCBI Protein Information	interleukin-4
UniProt Protein Name	Interleukin-4
UniProt Gene Name	IL4
UniProt Synonym Gene Names	IL-4; IL-4; BSF-1

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://www.aaabiotech.com/rat-elisa-kits/il-4/309914>