

Rat interleukin 17A ELISA Kit | IL17A elisa kit

Rat Interleukin 17, IL-17 ELISA Kit

CATALOG #
AAA80496

REACTIVITY
Rat

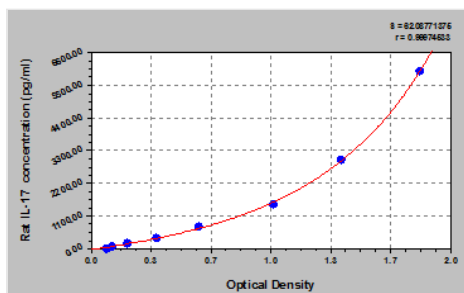
PRODUCT SYNONYMS

interleukin 17A; Rat Interleukin 17; IL-17 ELISA Kit; IL-17 ELISA KIT; CTLA8; IL-17; IL-17A; IL17; cytotoxic T-lymphocyte-associated antigen 8; cytotoxic T-lymphocyte-associated protein 8; cytotoxic T-lymphocyte-associated serine esterase 8; interleukin 17 (cytotoxic T-ly; IL17A elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Rat
Specificity	This assay has high sensitivity and excellent specificity for detection of Rat IL17A. No significant cross-reactivity or interference between Rat IL17A and analogues was observed.
Sequence Length	150
Samples	Serum, plasma, tissue homogenates
Detection Range	93.75 pg/ml-6000 pg/ml
Sensitivity	23.43 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 IL17A elisa kit	Introduction: Interleukin 17 (IL-17; also known as IL-17A) is a 30-35 kDa variably glycosylated homodimeric protein that belongs to a unique family of cysteine-knot related proteins. Its sequence was originally isolated from an activated rodent hybridoma and termed CTLA-8. It is synthesized as a 155 amino acid (aa) precursor that contains a 23 aa signal sequence and a 15 kDa, 132 aa mature segment. Although there are two intrachain disulfide bonds that create a ring reminiscent of those found in cysteine-knot proteins, the actual closed knot structure does not appear to form. IL-17 has one potential N-linked glycosylation site. In addition to IL-17A, members of the IL-17 family include IL-17B, IL-17C, IL-17D, IL-17E (also called IL-25), and IL-17F. All members of the IL-17 family have a similar protein structure, with four highly conserved cysteine residues critical to their 3-dimensional shape yet they have no sequence similarity to any other known cytokines. Numerous immune regulatory functions have been reported for the IL-17 family of cytokines, presumably due to their induction of many immune signaling molecules. Most notably, IL-17 is involved in inducing and mediating proinflammatory responses. IL-17 is commonly associated with allergic responses. IL-17 induces the production of many other cytokines (such as IL-6, G-CSF, GM-CSF, IL-1beta, TGF-beta, TNF-alpha), chemokines (including IL-8, GRO-alpha and MCP-1) and prostaglandins (e.g. PGE2) from many cell types (fibroblasts, endothelial cells, epithelial cells, keratinocytes and macrophages). The release of cytokines causes many functions, such as airway remodeling, a characteristic of IL-17 responses. The increased expression of chemokines attracts other cells including neutrophils but not eosinophils. IL-17 function is also essential to a subset of CD4+ T-Cells called T helper 17 (Th17) cells. As a result of these roles, the IL-17 family has been linked to many immune/autoimmune related diseases including rheumatoid arthritis, asthma, lupus, allograft rejection and anti-tumour immunity. Mature rat IL-17 is 61% and 60% aa identical to mouse and rat IL-17, respectively. It also shows limited aa sequence identity to other rat IL-17 family members. In particular, it shows 34%, 38%, 34% and 26%aa sequence identity to IL-17B, C, D, and E, respectively, and 49% aa sequence identity to IL-17F with which it is most homologous. While rodent and rat mature sequences show modest aa sequence identity, rat IL-17 is active on both mouse and rat cells. The cells principally known to produce IL-17 are the memory CD4+ T cells. In addition, CD8+ T cells as well as TCR+ CD4-CD8- T cells, neutrophils (PMNs) and eosinophils have also been reported to express mRNA transcripts for IL-17. Principle of the Assay: The microtiter plate provided in this kit has been pre-coated with an antibody specific to IL-17. Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody preparation specific for IL-17 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-17, 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-17 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 #	2498483
NCBI GeneID	301289
UniProt Accession #	Q61453
Molecular Weight	16,877 Da
NCBI Official Full Name	Interleukin-17A
NCBI Official Synonym Full Names	interleukin 17A
NCBI Official Symbol	IL17a
NCBI Official Synonym Symbols	IL17; IL-17; CTLA-8; IL-17A
NCBI Protein Information	interleukin-17A; cytotoxic T-lymphocyte-associated antigen 8; Interleukin 17 (cytotoxic T-lymphocyte-associated serine esterase 8)
UniProt Protein Name	Interleukin-17A
UniProt Gene Name	IL17a
UniProt Synonym Gene Names	Ctla8; IL17; IL-17; IL-17A; CTLA-8
UniProt Entry Name	IL17_RAT

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/il17a-rat-elisa-kits/interleukin-17a/80496>