

Interleukin-17A ELISA Kit | IL-17A elisa kit

Interleukin-17A (IL-17A)

CATALOG #
AAA77877

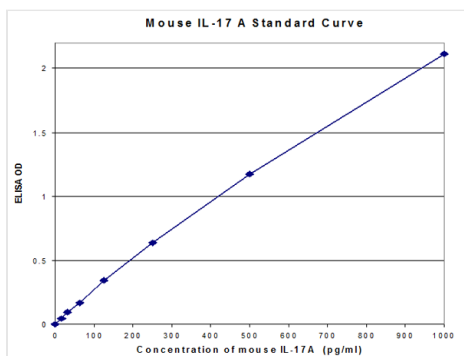
PRODUCT SYNONYMS

Interleukin-17A; Interleukin-17A (IL-17A); IL-17A elisa kit

PRODUCT SPECIFICATIONS

Sequence Length	155
Samples	Cell Culture Supernatant and mouse serum
Assay Type	Sandwich
Sensitivity	The minimum detectable dose of this mouse IL-17A ELISA kit was determined by adding two standard deviations to the mean optical density value of 20 zero standard replicates and calculating the corresponding concentration from the standard curve. The minimum detectable dose of mouse IL-17A calculated from calibrate I and calibrate II diluted standard curve was <2 pg/mL.
Intra-assay Precision	To determine within-run precision in Calibrator II, three different samples of known concentration were assayed by replicates of eight in one assay.
Inter-assay Precision	To determine between-run precision in Calibrator II, three different samples of known concentration were assayed by replicates on 6 different assays.
Intended Uses	This mouse Interleukin-17A ELISA Kit is designed for the in vitro quantitative determination of mouse interleukin-17A (IL-17A) concentrations in cell culture supernatant and mouse serum. This kit is intended for LABORATORY RESEARCH ONLY.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for IL-17A elisa kit	Principle of the assay: This mouse IL-17A enzyme linked immunosorbent assay (ELISA) applies a technique called a quantitative sandwich immunoassay. The microtiter plate provided in this kit has been pre-coated with a monoclonal antibody specific to mouse IL-17A. Standards or samples are then added to the appropriate microtiter plate wells. A biotin-conjugated antibody preparation specific for mouse IL-17A was added and incubated. Mouse IL-17A, if present, will bind and become immobilized by the antibody pre-coated on the wells. The microtiter plate wells are thoroughly washed to remove unbound mouse IL-17A and other components in the sample. Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. Avidin is a tetramer containing four identical subunits that each has a high affinity-binding site for biotin. The wells are thoroughly washed to remove all unbound HRP-conjugated Avidin, and a TMB (3,3',5, 5' tetramethyl- benzidine) substrate solution is added to each well. The enzyme (HRP) and substrate are allowed to react over a short incubation period. Only those wells that contain mouse IL- 17A, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in colour. The enzyme-substrate reaction is terminated by the addition of a sulphuric acid solution and the colour change is measured spectrophotometrically at a wavelength of 450 nm +/- 2 nm. In order to measure the concentration of mouse IL-17A in the samples this kit includes two calibration diluents (Calibrator Diluent I for serum testing and Calibrator Diluent II for cell culture supernatant testing.) According to the testing system, the provided standard is diluted (2-fold) with the appropriate Calibrator Diluent and assayed at the same time as the samples. This allows the operator to produce a standard curve of Optical Density (O.D) versus mouse IL-17A concentration (pg/mL). The concentration of IL-17A in the samples is then determined by comparing the O.D. of the samples to the standard curve. Background: Mouse Interleukin -17A (mIL-17A), also know as CTLA-8, is a secreted, homodimeric glycoprotein linked by disulfide link with a molecular mass of about 35 KD. The cytokine is the proto-type of a newly discovered pro-inflammatory cytokine family which consists of IL-17A, IL-17B, IL-17C, IL-17D, IL-17E (IL-25) and IL-17F. IL-17A is mainly produced by a group of CD4 T helper cells termed Th17 cells. In addition to Th17 cells, CD8 T helper cells, natural killer cells and granulocytes, can also secrete the cytokine after proper stimulation. IL17A exhibits structural homology and cross-species bioactivity between human and mouse cells. IL-17A acts through its receptor IL-17R. It was found to stimulate the expression of proinflammatory cytokines including IL-6, MCP-1, G-CSF, GM-CSF, IL-1alpha and TNF-alpha. Most of those cytokines plays a role in the proliferation, maturation and chemotaxis of neutrophils. Elevated levels of IL-17A have been found to implicate with autoimmune diseases, airway inflammation, allograft rejection, inflammatory bowel disease, psoriasis, cancer, vascular inflammation and development of atherosclerosis.
Product Categories/Family for IL-17A elisa kit	ELISA Kits for Mouse Cytokines and Receptors

NCBI AND UNIPROT INFORMATION

NCBI GI #	4504651
NCBI GeneID	3605
NCBI Accession #	NP_002181.1
NCBI GenBank Nucleotide #	NM_002190.2
Molecular Weight	17,504 Da
NCBI Official Full Name	interleukin-17A
NCBI Official Synonym Full Names	interleukin 17A
NCBI Official Symbol	IL17A
NCBI Official Synonym Symbols	IL17; CTLA8; IL-17; IL-17A
NCBI Protein Information	interleukin-17A; CTLA-8; cytotoxic T-lymphocyte-associated antigen 8; cytotoxic T-lymphocyte-associated protein 8; interleukin 17 (cytotoxic T-lymphocyte-associated serine esterase 8)
UniProt Protein Name	Interleukin-17A
UniProt Gene Name	IL17A
UniProt Entry Name	IL17_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.

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