

Mouse interleukin 21 ELISA Kit | IL21 elisa kit

Mouse Interleukin 21, IL-21 ELISA Kit

CATALOG #
AAA79588

REACTIVITY
Mouse

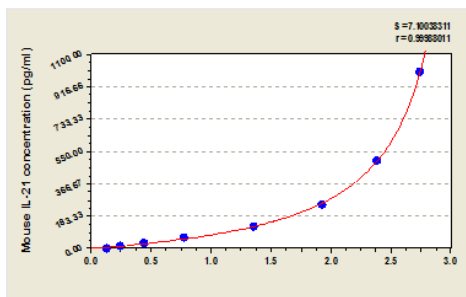
PRODUCT SYNONYMS

interleukin 21; Mouse Interleukin 21; IL-21 ELISA Kit; Mouse Interleukin 21 (IL-21) ELISA Kit; IL-21; Za11; interleukin-21 isoform; IL21 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Mouse
Specificity	This assay has high sensitivity and excellent specificity for detection of Mouse IL21. No significant cross-reactivity or interference between Mouse IL21 and analogues was observed.
Sequence Length	146
Samples	Serum, plasma, cell culture supernates, tissue homogenates
Detection Range	15.6 pg/ml-1000 pg/ml
Sensitivity	3.9 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 IL21 elisa kit	Introduction: Interleukin-21 is a protein that in humans is encoded by the IL21 gene. Interleukin 21 is a cytokine that has potent regulatory effects on cells of the immune system, including natural killer (NK) cells and cytotoxic T cells that can destroy virally infected or cancerous cells. This cytokine induces cell division/proliferation in its target cells. IL-21 is expressed in activated human CD4+ T cells but not in most other tissues. In addition, IL-21 expression is up-regulated in Th2 and Th17 subsets of T helper cells, as well as T follicular cells. Furthermore IL-21 is expressed in NK T cells regulating the function of these cells. Interleukin-21 is also produced by Hodgkin's lymphoma (HL) cancer cells (which is surprising because IL-21 was thought to be produced only in T cells). This observation may explain a great deal of the behavior of classical Hodgkin's lymphoma including clusters of other immune cells gathered around HL cells in cultures. Targeting IL-21 may be a potential treatment or possibly a test for HL. It has been shown that IL-21R knock-out mice express higher levels of IgE and lower levels of IgG1 than normal mice after antigen exposure. IgE levels decreased after mice were injected with IL-21. This has implications for the role of IL-21 in controlling allergic responses because of the role of IgE in hypersensitivity type 1 responses. IL-21 has been tried as therapy for alleviating allergic responses. It was shown to be successful in decreasing pro-inflammatory cytokines produced by T cells in addition to decreasing IgE levels in a mouse model for rhinitis (nasal passage inflammation). A study using mice with peanut allergies showed that systemic treatment of IL-21 was an effective means of mitigating the allergic response. This has strong implications for the pharmacological development of IL-21 for controlling both localized and systemic allergies. IL-21 was approved for Phase 1 clinical trials in metastatic melanoma (MM) and renal cell carcinoma (RCC) patients. It was shown to be safe for administration with flu-like symptoms as side effects. Dose-limiting toxicities included low lymphocyte, neutrophil, and thrombocyte count as well as hepatotoxicity. According to the Response Evaluation Criteria in Solid Tumors (RECIST) response scale, 2 out of 47 MM patients and 4 out of 19 RCC patients showed complete and partial responses, respectively. In addition, there was an increase of perforin, granzyme B, IFN-gamma, and CXCR3 mRNA in peripheral NK cells and CD8+ T cells. This suggested that IL-21 enhances the CD8+ effector functions thus leading to anti-tumor response. IL-21 proceeded to Phase 2 clinical trials where it was administered alone or coupled with drugs as sorafenib and rituximab. Principle of the Assay: The microtiter plate provided in this kit has been pre-coated with an antibody specific to IL-21. Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated polyclonal antibody preparation specific for IL-21. 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-21, 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-21. 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 #	11140821
NCBI GeneID	60505
NCBI Accession #	NP_068554.1
NCBI GenBank Nucleotide #	NM_021782.3
UniProt Accession #	Q9ES17
Molecular Weight	16,811 Da
NCBI Official Full Name	interleukin-21 isoform 2
NCBI Official Synonym Full Names	interleukin 21
NCBI Official Symbol	IL21
NCBI Official Synonym Symbols	IL-21
NCBI Protein Information	interleukin-21
UniProt Protein Name	Interleukin-21
UniProt Gene Name	IL21
UniProt Synonym Gene Names	IL-21

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/il21-mouse-elisa-kits/interleukin-21/79588>