

Human interleukin 13 ELISA Kit | IL13 elisa kit

Human Interleukin 13, IL-13 ELISA Kit

CATALOG #
AAA80220

REACTIVITY
Human

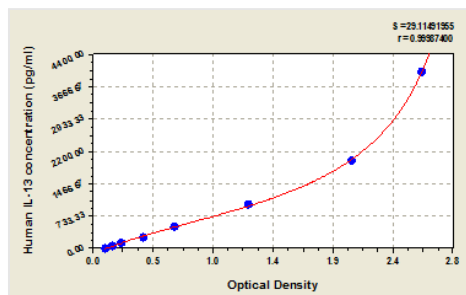
PRODUCT SYNONYMS

interleukin 13; Human Interleukin 13; IL-13 ELISA Kit; IL-13 ELISA KIT; ALRH; BHR1; IL-13; MGC116786; MGC116788; MGC116789; P600; ; IL13 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	This assay has high sensitivity and excellent specificity for detection of Human IL13. No significant cross-reactivity or interference between Human IL13 and analogues was observed.
Sequence Length	132
Samples	Serum, plasma and tissue homogenates
Detection Range	62.5 pg/ml-4000 pg/ml
Sensitivity	15.6 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 IL13 elisa kit

Introduction: Interleukin 13 (IL-13) is a cytokine secreted by many cell types, but especially T helper type 2 (Th2) cells, that is an important mediator of allergic inflammation and disease. In addition to effects on immune cells that are similar to those of the closely related cytokine IL-4, IL-13 is more importantly implicated as a central mediator of the physiologic changes induced by allergic inflammation in many tissues. IL-13 induces its effects through a multi-subunit receptor that includes the alpha chain of the IL-4 receptor (IL-4Ralpha), which is also a component of the IL-4 receptor, and at least one of two known IL-13-specific binding chains. Most of the biological effects of IL-13 are linked to a single transcription factor, signal transducer and activator of transcription 6 (STAT6). The functions of IL-13 overlap considerably with those of IL-4, especially with regard to changes induced on hematopoietic cells, but these effects are probably less important given the more potent role of IL-4. Thus, although IL-13 can induce immunoglobulin E (IgE) secretion from activated human B cells, deletion of IL-13 from mice does not markedly affect either Th2 cell development or antigen-specific IgE responses induced by potent allergens. In comparison, deletion of IL-4 abrogates these responses. Thus, rather than a lymphoid cytokine, IL-13 acts more prominently as a molecular bridge linking allergic inflammatory cells to the non-immune cells in contact with them, thereby altering physiological function. Although IL-13 is associated primarily with the induction of airway disease, it also has anti-inflammatory properties. Airway matrix metalloproteinases (MMPs), which are protein-degrading enzymes, are required to induce egression of effete parenchymal inflammatory cells into the airway lumen where they are then cleared. Among other factors, IL-13 induces these MMPs as part of a mechanism that protects against excessive allergic inflammation that predisposes to asphyxiation.

Principle of the Assay: The microtiter plate provided in this kit has been pre-coated with an antibody specific to IL-13. Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated polyclonal antibody preparation specific for IL-13 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-13, 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-13 in the samples is then determined by comparing the O.D. of the samples to the standard curve

NCBI AND UNIPROT INFORMATION

NCBI GI #	27819610
NCBI GeneID	281247
NCBI Accession #	NP_776514.1
NCBI GenBank Nucleotide #	NM_174089.1
UniProt Accession #	Q9XSV9 ; Q9TV84 ; A9QWR5
Molecular Weight	14,651 Da
NCBI Official Full Name	interleukin-13
NCBI Official Synonym Full Names	interleukin 13<
NCBI Official Symbol	IL13
NCBI Protein Information	interleukin-13; IL-13
UniProt Protein Name	Interleukin-13
UniProt Gene Name	IL13
UniProt Synonym Gene Names	IL-13
UniProt Entry Name	IL13_BOVIN

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.