

IL-12p70 elisa kit

Mouse IL-12p70 ELISA KIT

CATALOG #
AAA267226

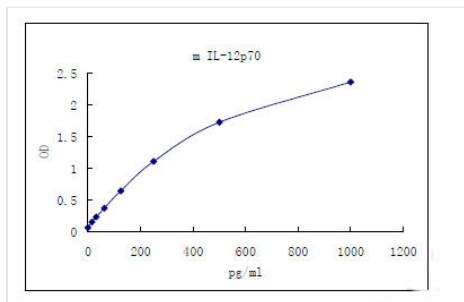
PRODUCT SYNONYMS

IL-12p70; Mouse IL-12p70 ELISA KIT; IL-12p70 elisa kit

PRODUCT SPECIFICATIONS

Specificity	This assay recognizes both recombinant and natural rat IL-10. The factors listed below were prepared at 50ng/ml and assayed for cross-reactivity. No significant cross-reactivity was observed.
Samples	Cell Culture Supernate, Serum And Plasma
Assay Type	Quantitative Sandwich
Sensitivity	31.25 pg/mL.
Intra-assay Precision	Three samples of known concentration were tested 20 times on one plate to evaluate the Intra-plate precision
Inter-assay Precision	Three samples of known concentration were tested 20 times separate assays to evaluate the Inter-plate precision. Assay were using two lots of components.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for IL-12p70 elisa kit

Principle of the Assay: This assay employs the quantitative sandwich enzyme immunoassay technique. A monoclonal antibody specific for IL-10 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any IL-10 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-10 is added to the wells and binds to the combination of capture antibody-IL-10 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 colored product TMB is formed in proportion to the amount of IL-10 present in the sample. The reaction is terminated by addition of acid and absorbance is measured. A standard curve is prepared from seven IL-10 standard dilutions and IL-10 sample concentration determined!!

Background/Introduction: Interleukin-10 (IL-10), also known as cytokine synthesis inhibitory factor (CSIF), is the charter member of the IL-10 alpha-helical cytokine family that also includes IL-19, IL-20, IL-22, IL-24, and IL-26/AK155 (1-3). IL-10 is secreted by many activated hematopoietic cell types as well as hepatic stellate cells, keratinocytes, and placental cytotrophoblasts. Whereas human IL-10 is active on mouse cells, mouse IL-10 does not act on human cells (4, 5). Mature rat IL-10 shares 85% amino acid sequence identity with mouse IL-10 and 71%-79% with bovine, canine, equine, feline, guinea pig, human, ovine, and porcine IL-10. It contains two intrachain disulfide bridges and is expressed as a 36 kDa noncovalently-associated homodimer (4, 6, 7). IL-10 mediates its biological activities through a heteromeric receptor complex composed of the type II cytokine receptor subunits IL-10 Ralpha and IL-10 Rbeta. IL-10 Ralpha is a 110 kDa transmembrane glycoprotein that is expressed on lymphocytes, NK cells, macrophages, monocytes, astrocytes, intestinal epithelial cells, cytotrophoblasts, and activated hepatic stellate cells (8-13), while the 75 kDa transmembrane IL-10 Rbeta is widely expressed (14, 15). The IL-10 dimer binds to two IL-10 Ralpha chains, triggering recruitment of two IL-10 Rbeta chains (14, 15). IL-10 Rbeta does not bind IL-10 directly but is required for signal transduction. IL-10 Rbeta also associates with IL-20 Ralpha, IL-22 Ralpha1, or IL-28 Ralpha to form the receptor complexes for IL-22, IL-26, IL-28, and IL-29 (16-18). The involvement of IL-10 in immunoregulation includes both suppressive and stimulatory effects. It functions as an anti-inflammatory cytokine by inhibiting the expansion and activation of Th1 cells and Th17 cells (19-21), and by promoting the development of M2 macrophages (21). Its expression by immunosuppressive regulatory T cells (Treg) and regulatory B cells is important for Treg proliferation (19). Within a tumor microenvironment, however, IL-10 inhibits the expansion of Treg as well as myeloid-derived suppressor cells (22, 23). IL-10 induces the intratumoral accumulation and activation of CD8 + T cells (24, 25). IL-10 exerts protective effects including limiting tissue damage in arthritic inflammation (19) and promoting muscle regeneration after injury (21), but it also contributes to the persistence of viral infections (26). The levels of IL-10 have been found to be elevated in Sjogren's syndrome (saliva), primary CNS lymphoma (cerebrospinal fluid), and ovarian cancer (serum and ascites) (27-29). Its levels have been found to be decreased in the serum of patients with recurrent heart attacks or during preeclampsia and also in the seminal fluid of infertile men (30-32).

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/elisa-kits/il-12p70/267226>