For Research Use Only

NeutraKine® IL-17A Monoclonal antibody, PBS Only (Detector)

Catalog Number: 69021-1-PBS



Basic Information

Catalog Number:

69021-1-PBS

Size:

100ug , Concentration: 1mg/ml by

Nanodrop;

Mouse

Isotype:

Immunogen Catalog Number:

HZ-1113

Purification Method:

Protein G purification

CloneNo.: 1F3E3

Applications

Tested Applications:

Neutralization, ELISA, Sandwich ELISA, Indirect ELISA,

Sample test

Species Specificity:

human

Product Information

69021-1-PBS targets NeutraKine® IL-17A as part of a matched antibody pair:

MP50004-1: 69021-2-PBS capture and 69021-1-PBS detection (validated in Sandwich ELISA)

GenBank Accession Number:

GeneID (NCBI):

ENSEMBL Gene ID:

ENSG00000112115 Full Name:

interleukin 17A

Unconjugated mouse monoclonal antibody pair in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

Background Information

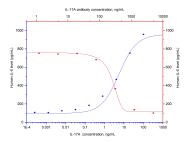
IL17A, also named as IL-17, is a proinflammatory cytokine. IL-17, synthesized only by memory T cells and natural killer cells, has pleiotropic effects, mainly in the recruitment and activation of neutrophils. This cytokine regulates the activities of NF-kappaB and mitogen-activated protein kinases. This cytokine can stimulate the expression of IL6 and cyclooxygenase-2 (PTGS2/COX-2), as well as enhance the production of nitric oxide (NO). High levels of this cytokine are associated with several chronic inflammatory diseases including rheumatoid arthritis, psoriasis and multiple sclerosis. The IL-17 receptor is a type I transmembrane protein, that is widely expressed on epithelial cells, fibroblasts, B and T cells, and monocytic cells. In psoriatic skin lesions, both Th17 cells and their downstream effector molecules, e.g. IL-17 and IL-22, are highly increased.

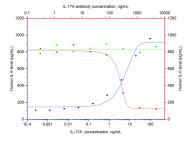
This antibody can be used to neutralize the bioactivity of IL-17A.

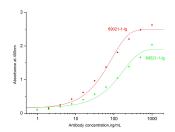
Storage

Storage: Store at -80°C. Storage Buffer: PBS only, pH7.3

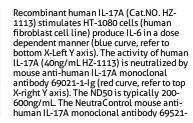
Selected Validation Data

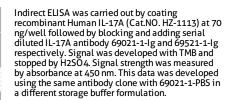


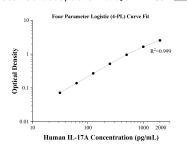


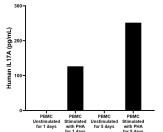


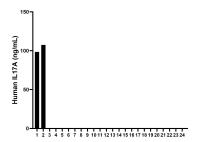
Recombinant human IL-17A (Cat.NO. HZ-1113) stimulates HT-1080 cells (human fibroblast cell line) produce IL-6 in a dose dependent manner (blue curve, refer to bottom X-Left Y axis). The activity of human IL-17A (40ng/mL HZ-1113) is neutralized by mouse anti-human IL-17A monoclonal antibody 69021-1-Ig (red curve, refer to top X-right Y axis). The ND50 is typically 200-600ng/mL. This data was developed using the same antibody clone with 69021-1-PBS











Sandwich ELISA standard curve of MP50004-1, IL17A Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 69021-2-PBS. Detection antibody: 69021-1-PBS. Standard: HZ-1113. Range: 31.25-2000 pg/mL.

Human peripheral blood mononuclear cells (PBMC) were cultured unstimulated or stimulated with 10 µg/mL PHA for 3 days or 5 days. The mean IL17A concentration was undetected in unstimulated PBMC supernatant, 126.6 pg/mL in PBMC supernatant stimulated with PHA for 1 day and 251.8 pg/mL in PBMC supernatant stimulated with PHA for 5 days.

Twenty-four serum samples from volunteers were evaluated for human IL-17A in this assay. twenty-two samples measured less than the lowest standard, 31.25 pg/mL. Two samples measured 98.5 pg/mL and 107.5 pg/mL respectively. No medical histories were available for the donors used in this study.