

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

Catalog Number: 69021-1-PBS

Basic Information

Catalog Number:

69021-1-PBS

Concentration:

1mg/ml

Source:

Mouse

Isotype:

IgG1

Immunogen Catalog Number:

HZ-1113

GenBank Accession Number:

GeneID (NCBI):

3605

ENSEMBL Gene ID:

ENSG00000112115

Full Name:

interleukin 17A

Purification Method:

Protein G purification

CloneNo.:

1F3E3

Applications

Tested Applications:

Neutralization, ELISA, Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity:

human

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:

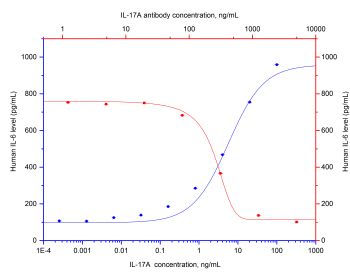
Store at -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

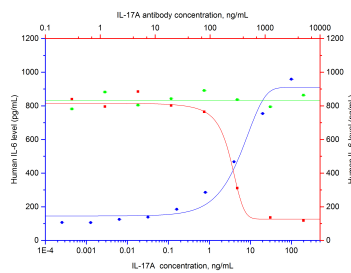
Storage Buffer:

PBS only, pH7.3

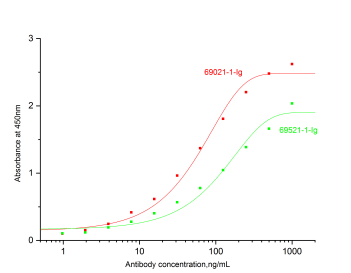
Selected Validation Data



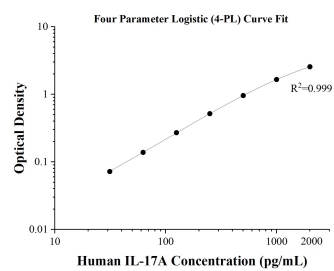
Recombinant human IL-17A (Cat.NO. HZ-1113) stimulates HT-1080 cells (human fibroblast cell line) produce IL-6 in a dose dependent manner (blue curve, refer to bottom X-Left Y axis). The activity of human IL-17A (40ng/mL HZ-1113) is neutralized by mouse anti-human IL-17A monoclonal antibody 69021-1-Ig (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 in a different storage buffer



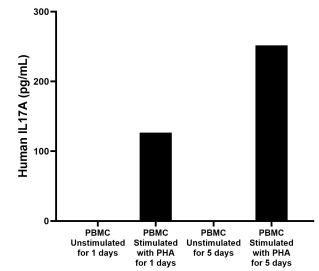
Recombinant human IL-17A (Cat.NO. HZ-1113) stimulates HT-1080 cells (human fibroblast cell line) produce IL-6 in a dose dependent manner (blue curve, refer to bottom X-Left Y axis). The activity of human IL-17A (40ng/mL HZ-1113) is neutralized by mouse anti-human IL-17A monoclonal antibody 69021-1-Ig (red curve, refer to top X-right Y axis). The ND50 is typically 200-600ng/mL. The NeutraControl mouse anti-human IL-17A monoclonal antibody 69521-1-Ig could recognize human



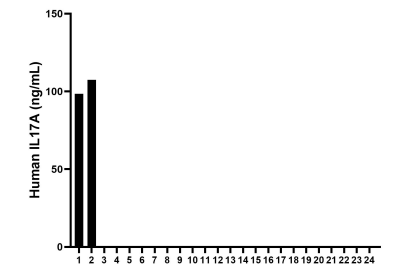
Indirect ELISA was carried out by coating recombinant Human IL-17A (Cat.NO. HZ-1113) at 70 ng/well followed by blocking and adding serial diluted IL-17A antibody 69021-1-Ig and 69521-1-Ig respectively. Signal was developed with TMB and stopped by H2SO4. Signal strength was measured by absorbance at 450 nm. This data was developed using the same antibody clone with 69021-1-PBS in a different storage buffer formulation.



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 μ g/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.