

ARG83011 Canine IL17 / IL17A ELISA kit

Package: 96 wells
Store at: 4°C

Summary

Product Description	ARG83011 Canine IL17 / IL17A ELISA kit is an Enzyme Immunoassay kit for the quantification of Canine IL17 / IL17A in serum, plasma (heparin), ascites, urine and cell culture supernatants.
Tested Reactivity	Dog
Tested Application	ELISA
Specificity	Not cross-reacts with: Human IL1 beta, IL6, IL4, IL17F. Mouse IL 17A, IL 17F. Rat IL 17A, IL 17F.
Target Name	IL17 / IL17A
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	31.25 pg/ml
Sample Type	Serum, plasma (heparin), ascites, urine and cell culture supernatants.
Standard Range	62.5-4000 pg/ml
Sample Volume	100 µl
Alternate Names	IL17A, Interleukin 17A, IL 17A, IL 17, CTLA8, IL17, Interleukin 17 (Cytotoxic T Lymphocyte Associated Serine Esterase 8), Cytotoxic T Lymphocyte Associated Protein 8, Cytotoxic T Lymphocyte Associated Antigen 8, Interleukin 17A, CTLA 8, Interleukin 17, ILA17

Application Instructions

Assay Time ~ 4 hours

Properties

Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	IL17A
Gene Full Name	Interleukin 17A
Background	This gene is a member of the IL-17 receptor family which includes five members (IL-17RA-E) and the encoded protein is a proinflammatory cytokine produced by activated T cells. IL-17A-mediated downstream pathways induce the production of inflammatory molecules, chemokines, antimicrobial

peptides, and remodeling proteins. The encoded protein elicits crucial impacts on host defense, cell trafficking, immune modulation, and tissue repair, with a key role in the induction of innate immune defenses. This cytokine stimulates non-hematopoietic cells and promotes chemokine production thereby attracting myeloid cells to inflammatory sites. This cytokine also regulates the activities of NF-kappaB and mitogen-activated protein kinases and can stimulate the expression of IL6 and cyclooxygenase-2 (PTGS2/COX-2), as well as enhance the production of nitric oxide (NO). IL-17A plays a pivotal role in various infectious diseases, inflammatory and autoimmune disorders, and cancer. High levels of this cytokine are associated with several chronic inflammatory diseases including rheumatoid arthritis, psoriasis and multiple sclerosis. The lung damage induced by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) is to a large extent, a result of the inflammatory response promoted by cytokines such as IL17A. [provided by RefSeq, Sep 2020]

Function

Upon acute injury, has a direct role in epithelial barrier formation by regulating OCLN localization and tight junction biogenesis. As part of the mucosal immune response induced by commensal bacteria, enhances host's ability to resist pathogenic bacterial and fungal infections by promoting neutrophil recruitment and antimicrobial peptides release. In synergy with IL17F, mediates the production of antimicrobial beta-defensins DEFB1, DEFB103A, and DEFB104A by mucosal epithelial cells, limiting the entry of microbes through the epithelial barriers. Involved in antiviral host defense through various mechanisms. Enhances immunity against West Nile virus by promoting T cell cytotoxicity. May play a beneficial role in influenza A virus (H5N1) infection by enhancing B cell recruitment and immune response in the lung. Contributes to influenza A virus (H1N1) clearance by driving the differentiation of B-1a B cells, providing for production of virus-specific IgM antibodies at first line of host defense. [UniProt]

Highlight

Related products:

[IL17 antibodies](#); [IL17 ELISA Kits](#); [IL17 recombinant proteins](#);

New ELISA data calculation tool:

[Simplify the ELISA analysis by GainData](#)

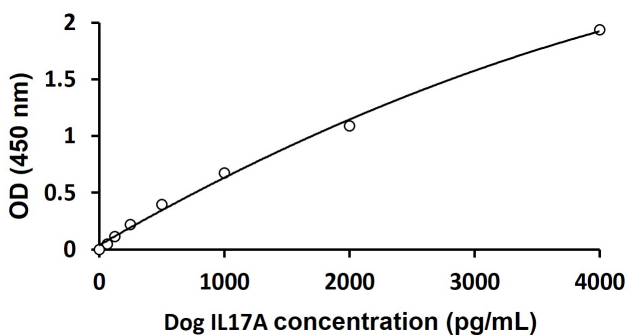
PTM

Disulfide bond, Glycoprotein. [UniProt]

Cellular Localization

Secreted. [UniProt]

Images



ARG83011 Canine IL17 / IL17A ELISA kit standard curve image

ARG83011 Canine IL17 / IL17A ELISA kit results of standard run with optical density reading at 450 nm