

## ARG82642 Canine IL10 ELISA Kit

Package: 96 wells  
Store at: 4°C

### Summary

Product Description	ARG82642 Canine IL10 ELISA Kit is an Enzyme Immunoassay kit for the quantification of Canine IL10 in serum, plasma, cell lysate and tissue lysate.
Tested Reactivity	Dog
Tested Application	ELISA
Specificity	The following recombinant canine proteins were tested and exhibited no cross-reactivity or interference: Adiponectin, ApoA1, BMP1, BMP2, BMP3, BMP4, BMP5, BMP7, CCL2, CCL4, CCL5, CRP, HGF, HSP27, IL1 beta, IL1RA, IL1 alpha, IL1 RI, IL2, IL4, IL5, IL6, IL6R, IL8, IL12, IL13, IL15, IL17C, IL21, IL23, IFN beta, IFN gamma, PDGF, PLA2G7, prolactin, serpin E1, TGF beta 1, TGF beta 2, TGF beta 3, TLR1, TLR2, TL3, TLR9, TNF alpha, TNF RI, TNF RII, VEGF and VEGF R1.
Target Name	IL10
Conjugation	HRP
Conjugation Note	Read at 450 nm.
Sensitivity	13 pg/ml
Sample Type	Serum, plasma, cell lysate and tissue lysate.
Standard Range	25 - 1600 pg/ml
Sample Volume	100 µl
Precision	Intra-Assay CV: 5% Inter-Assay CV: 8%
Alternate Names	IL10A; GVHDS; TGIF; IL-10; Cytokine synthesis inhibitory factor; CSIF; Interleukin-10

### Application Instructions

Assay Time	~ 3.5 hours
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### 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	IL10
Gene Full Name	interleukin 10
Background	The protein encoded by this gene is a cytokine produced primarily by monocytes and to a lesser extent

by lymphocytes. This cytokine has pleiotropic effects in immunoregulation and inflammation. It down-regulates the expression of Th1 cytokines, MHC class II Ags, and costimulatory molecules on macrophages. It also enhances B cell survival, proliferation, and antibody production. This cytokine can block NF-kappa B activity, and is involved in the regulation of the JAK-STAT signaling pathway. Knockout studies in mice suggested the function of this cytokine as an essential immunoregulator in the intestinal tract. Mutations in this gene are associated with an increased susceptibility to HIV-1 infection and rheumatoid arthritis. [provided by RefSeq, May 2011]

#### Function

Major immune regulatory cytokine that acts on many cells of the immune system where it has profound anti-inflammatory functions, limiting excessive tissue disruption caused by inflammation. Mechanistically, IL10 binds to its heterotetrameric receptor comprising IL10RA and IL10RB leading to JAK1 and STAT2-mediated phosphorylation of STAT3 (PubMed:16982608). In turn, STAT3 translocates to the nucleus where it drives expression of anti-inflammatory mediators (PubMed:18025162). Targets antigen-presenting cells (APCs) such as macrophages and monocytes and inhibits their release of pro-inflammatory cytokines including granulocyte-macrophage colony-stimulating factor /GM-CSF, granulocyte colony-stimulating factor/G-CSF, IL-1 alpha, IL-1 beta, IL-6, IL-8 and TNF-alpha (PubMed:1940799, PubMed:7512027, PubMed:11564774). Interferes also with antigen presentation by reducing the expression of MHC-class II and co-stimulatory molecules, thereby inhibiting their ability to induce T cell activation (PubMed:8144879). In addition, controls the inflammatory response of macrophages by reprogramming essential metabolic pathways including mTOR signaling (By similarity). [UniProt]

#### Highlight

Related products:

[IL10 antibodies](#); [IL10 ELISA Kits](#); [IL10 recombinant proteins](#);

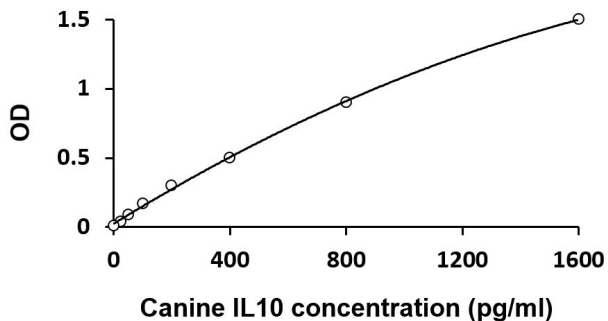
New ELISA data calculation tool:

[Simplify the ELISA analysis by GainData](#)

#### Cellular Localization

Secreted. [UniProt]

## Images



ARG82642 Canine IL10 ELISA Kit standard curve image

ARG82642 Canine IL10 ELISA Kit results of a typical standard run with optical density reading at 450 nm.