

ARG82820 Monkey RANTES ELISA Kit

Package: 96 wells
Store at: 4°C

Summary

Product Description	ARG82820 Monkey RANTES ELISA Kit is an Enzyme Immunoassay kit for the quantification of Monkey RANTES in serum, plasma and cell culture supernatants.
Tested Reactivity	Mk
Tested Application	ELISA
Specificity	Cross-Reactivity: Not react with ApoAI, BMP7, CCL2, CRP, FGF acidic, HGF, HSP27, IL1 alpha, IFN gamma, IGF1, MMP2, PDGF, PLA2G7, serpin E1, TGF beta 1, TLR3, TNF alpha and VEGF.
Target Name	RANTES
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	7.5 pg/ml
Sample Type	Serum, plasma and cell culture supernatants.
Standard Range	15 - 1000 pg/ml
Sample Volume	100 µl
Precision	Intra-Assay CV: 6.0% Inter-Assay CV: 10.0%
Alternate Names	3-68; C-C motif chemokine 5; SIS-delta; D17S136E; SISd; T cell-specific protein P228; EoCP; Small-inducible cytokine A5; Eosinophil chemotactic cytokine; TCP228; 4-68; RANTES; SCYA5; eoCP; T-cell-specific protein RANTES

Application Instructions

Assay Time	~ 3 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	CCL5
Gene Full Name	chemokine (C-C motif) ligand 5
Background	This gene is one of several chemokine genes clustered on the q-arm of chromosome 17. Chemokines form a superfamily of secreted proteins involved in immunoregulatory and inflammatory processes.

The superfamily is divided into four subfamilies based on the arrangement of the N-terminal cysteine residues of the mature peptide. This chemokine, a member of the CC subfamily, functions as a chemoattractant for blood monocytes, memory T helper cells and eosinophils. It causes the release of histamine from basophils and activates eosinophils. This cytokine is one of the major HIV-suppressive factors produced by CD8+ cells. It functions as one of the natural ligands for the chemokine receptor chemokine (C-C motif) receptor 5 (CCR5), and it suppresses in vitro replication of the R5 strains of HIV-1, which use CCR5 as a coreceptor. Alternative splicing results in multiple transcript variants that encode different isoforms. [provided by RefSeq, Jul 2013]

Function

Chemoattractant for blood monocytes, memory T-helper cells and eosinophils. Causes the release of histamine from basophils and activates eosinophils. May activate several chemokine receptors including CCR1, CCR3, CCR4 and CCR5. One of the major HIV-suppressive factors produced by CD8+ T-cells. Recombinant RANTES protein induces a dose-dependent inhibition of different strains of HIV-1, HIV-2, and simian immunodeficiency virus (SIV). The processed form RANTES(3-68) acts as a natural chemotaxis inhibitor and is a more potent inhibitor of HIV-1-infection. The second processed form RANTES(4-68) exhibits reduced chemotactic and HIV-suppressive activity compared with RANTES(1-68) and RANTES(3-68) and is generated by an unidentified enzyme associated with monocytes and neutrophils (PubMed:16791620, PubMed:1380064, PubMed:8525373, PubMed:9516414, PubMed:15923218). May also be an agonist of the G protein-coupled receptor GPR75, stimulating inositol trisphosphate production and calcium mobilization through its activation. Together with GPR75, may play a role in neuron survival through activation of a downstream signaling pathway involving the PI3, Akt and MAP kinases. By activating GPR75 may also play a role in insulin secretion by islet cells (PubMed:23979485). [UniProt]

PTM

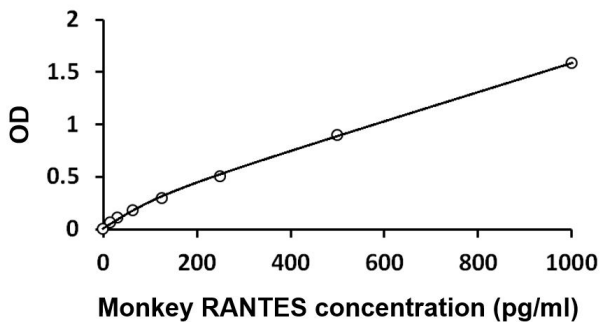
N-terminal processed form RANTES(3-68) is produced by proteolytic cleavage, probably by DPP4, after secretion from peripheral blood leukocytes and cultured sarcoma cells.

The identity of the O-linked saccharides at Ser-27 and Ser-28 are not reported in PubMed:1380064. They are assigned by similarity. [UniProt]

Cellular Localization

Secreted. [UniProt]

Images



ARG82820 Monkey RANTES ELISA Kit standard curve image

ARG82820 Monkey RANTES ELISA Kit results of a typical standard run with optical density reading at 450 nm.