

Rat Rantes ELISA Kit ab213907

1 Image

Overview

Product name Rat Rantes ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Sample 1	16	135pg/ml	6.21	4.6%
Sample 2	16	327pg/ml	17	5.2%
Sample 3	16	536pg/ml	29.48	5.5%

Inter-assay

Sample	n	Mean	SD	CV%
Sample 1	24	118pg/ml	9.68	8.2%
Sample 2	24	293pg/ml	19.63	6.7%
Sample 3	24	625pg/ml	43.75	7%

Sample type Cell culture supernatant, Serum, Hep Plasma, EDTA Plasma, Cit plasma

Assay type Sandwich (quantitative)

Sensitivity < 1 pg/ml

Range 15.6 pg/ml - 1000 pg/ml

Assay time 3h 30m

Assay duration Multiple steps standard assay

Species reactivity **Reacts with:** Rat

Product overview The Rat Rantes Enzyme-Linked Immunosorbent Assay (ELISA) kit (ab213907) is designed for the quantitative measurement of Rat Rantes in cell culture supernatants, serum and plasma (heparin, EDTA, citrate).

The ELISA kit is based on standard sandwich enzyme-linked immune-sorbent assay technology.

A monoclonal antibody from mouse specific for Rantes has been pre-coated onto 96-well plates. Standards and test samples are added to the wells; a biotinylated detection polyclonal antibody from goat specific for Rantes is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex is added and unbound conjugates are washed away with PBS or TBS buffer. HRP substrate TMB is used to visualize HRP enzymatic reaction. TMB is catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the Rat Rantes amount of sample captured in plate.

Notes Rantes (regulated on activation normal T cell expressed and secreted) is one of the natural ligands for the chemokine receptor CCR5 and potently suppresses *in vitro* replication of the R5 strains of HIV-1, which use CCR5 as a coreceptor. Peripheral blood mononuclear cells or CD4(+) lymphocytes obtained from different individuals have wide variations in their ability to secrete Rantes. The Rantes gene product is predicted to be 10 kDa and, after cleavage of the signal peptide, approximately 8 kDa. Of the 68 residues, 4 are cysteines, and there are no sites for N-linked glycosylation. Rantes is expressed by cultured T cell lines that are Ag specific and growth factor dependent.

Platform Pre-coated microplate (12 x 8 well strips)

Properties

Storage instructions Store at -20°C. Please refer to protocols.

Components	Identifier	1 x 96 tests	1 x 96 tests
ABC Diluent Buffer	Blue Cap	1 x 12ml	1 x 12ml
Adhesive Plate Seal		4 units	4 units
Antibody Diluent Buffer	Green Cap	1 x 12ml	1 x 12ml
Anti-rat Rantes coated Microplate (12 x 8 wells)		1 unit	1 unit
Avidin-Biotin-Peroxidase Complex (ABC)		1 x 100µl	1 x 100µl
Biotinylated anti- Rat Rantes antibody		1 x 100µl	1 x 100µl
Lyophilized recombinant Rat Rantes standard		2 vials	2 vials
Sample Diluent Buffer	Green Cap	1 x 30ml	1 x 30ml
TMB Color Developing Agent	Black Cap	1 x 10ml	1 x 10ml
TMB Stop Solution	Yellow Cap	1 x 10ml	1 x 10ml
Wash Buffer (25X)		1 x 20ml	1 x 20ml

Function Chemoattractant for blood monocytes, memory T-helper cells and eosinophils. Causes the release of histamine from basophils and activates eosinophils. Binds to 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.

Tissue specificity

T-cell and macrophage specific.

Sequence similarities

Belongs to the intercrine beta (chemokine CC) family.

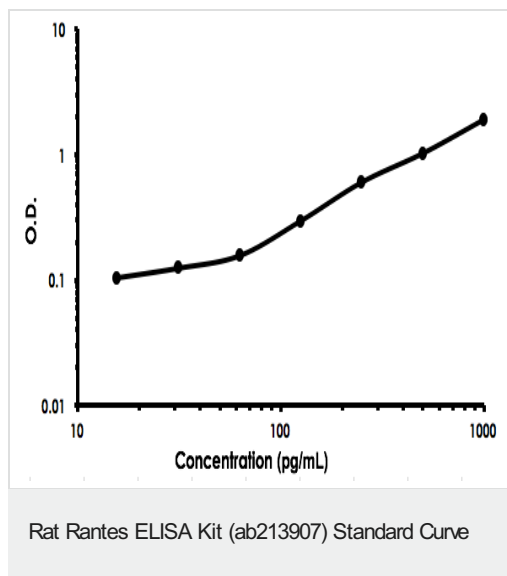
Post-translational modifications

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.

Cellular localization

Secreted.

Images



Rat Rantes ELISA Kit (ab213907) Standard Curve

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours

- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors