

# CCL5/RANTES Rabbit pAb

CCL5/RANTES Rabbit pAb Catalog # AP57808

#### **Product Information**

**Application** IHC-P, IHC-F, IF

Primary Accession
Reactivity
Pig, Mouse
Host
Rabbit
Clonality
Polyclonal
Calculated MW
Physical State
Liquid

Immunogen KLH conjugated synthetic peptide derived from human CCL5/RANTES

**Epitope Specificity** 51-91/91 **Isotype** IgG

**Purity** affinity purified by Protein A

**Buffer** 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

**SUBCELLULAR LOCATION** Secreted.

**SIMILARITY** Belongs to the intercrine beta (chemokine CC) family.

**Post-translational** N-terminal processed form RANTES(3-68) is produced by proteolytic cleavage, modifications probably by DPP4, after secretion from peripheral blood leukocytes and

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.

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

**Background Descriptions** This gene is one of several CC cytokine genes clustered on the q-arm of

chromosome 17. Cytokines are a family of secreted proteins involved in immunoregulatory and inflammatory processes. The CC cytokines are proteins characterized by two adjacent cysteines. The cytokine encoded by this gene 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 CCR5 and it suppresses in vitro replication of the R5

strains of HIV-1, which use CCR5 as a coreceptor.

#### **Additional Information**

**Gene ID** 6352

Other Names C-C motif chemokine 5, EoCP, Eosinophil chemotactic cytokine, SIS-delta,

Small-inducible cytokine A5, T cell-specific protein P228, TCP228,

T-cell-specific protein RANTES, RANTES(3-68), RANTES(4-68), CCL5, D17S136E,

SCYA5

**Target/Specificity** T-cell and macrophage specific.

**Dilution** IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

**Storage** Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

#### **Protein Information**

Name CCL5

**Synonyms** D17S136E, SCYA5

**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) (PubMed:1380064,

PubMed:<u>15923218</u>, PubMed:<u>16791620</u>, PubMed:<u>8525373</u>, PubMed:<u>9516414</u>). 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).

**Cellular Location** Secreted.

**Tissue Location** Expressed in the follicular fluid (at protein level). T-cell and macrophage

specific.

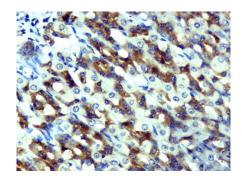
## **Background**

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### **Images**

Paraformaldehyde-fixed, paraffin embedded (Rat stomach); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CCL5/RANTES) Polyclonal Antibody, Unconjugated (AP57808) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit)

(sp-0023) instructions and DAB staining.



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.