

## **Product datasheet for SM1416P**

#### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

### RANTES (CCL5) Mouse Monoclonal Antibody [Clone ID: 5B3-D5]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: 5B3-D5

**Applications:** ELISA, FN, IF, IHC, IP, WB

Recommended Dilution: Neutralization: To yield one-half maximal inhibition [ND50] of the biological activity of

Human RANTES (100 ng/ml), a concentration of 3.0-5.0  $\mu$ g/ml of this antibody is required. **Sandwich ELISA**: In a Sandwich ELISA (assuming 100  $\mu$ l/well), a concentration of 2.0-4.0  $\mu$ g/ml of this antibody will detect at least 500 pg/ml of recombinant Human RANTES when used with Biotinylated antigen affinity purified anti-Human RANTES (PP1064B1 or PP1064B2) as the

detection antibody at a concentration of approximately 0.5-1.0 µg/ml.

**Western Blot:** To detect Human RANTES by Western Blot analysis this antibody can be used at a concentration of 0.5-1.0  $\mu$ g/ml. Used in conjunction with compatible secondary reagents the detection limit for recombinant Human RANTES is 0.25-2.0  $\mu$ g/lane, under reducing conditions and 0.25-0.50  $\mu$ g/lane, under non-reducing conditions.

Immunohistochemistry on Frozen Sections.

**Immunohistochemistry on Paraffin Sections:** 10  $\mu$ g/ml with an overnight incubation at 4°C. An HRP-labeled polymer detection system was used with a DAB chromogen. Heat induced antigen retrieval with a pH 6.0 citrate buffer is recommended. Optimal concentrations and conditions may vary. *Protocol and staining provided by Dr. Lauren Binge,* 

Laboratory of Prof. Charles Mackay, Monash Univeristy, Australia.

**Immunofluorescence:** This antibody (Lot #057E172) stained PBMC. The primary antibody was incubated at 10.0 mg/ml for one hour at room temperature followed by a fluorescent labeled secondary antibody. *Protocol and staining provided by Dr. Lauren Binge, Laboratory of Prof. Charles Mackay, Monash University, Australia.* 

Reactivity: Human
Host: Mouse
Isotype: IgG2b

Clonality: Monoclonal

Immunogen: E. Coli derived recombinant Human Rantes (Cat.-No PA123)

**Specificity:** Recognizes Human RANTES chemokine. Other species not tested.





### RANTES (CCL5) Mouse Monoclonal Antibody [Clone ID: 5B3-D5] - SM1416P

**Formulation:** PBS without preservatives

State: Azide Free

State: Lyophilized (sterile filtered) purified Ig fraction

**Reconstitution Method:** Restore in sterile water to a concentration of 1.0 mg/ml.

**Purification:** Affinity Chromatography on Protein A

Conjugation: Unconjugated

**Storage:** Store lyophilized at 2-8°C for 6 months or at -20°C long term.

After reconstitution store the antibody undiluted at 2-8°C for one month or (in alignots) at -

20°C long term.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

**Gene Name:** C-C motif chemokine ligand 5

Database Link: Entrez Gene 6352 Human

P13501

**Background:** RANTES (Regulated-on-activation-normal-T-cell-expressed-and-secreted) is a member of the

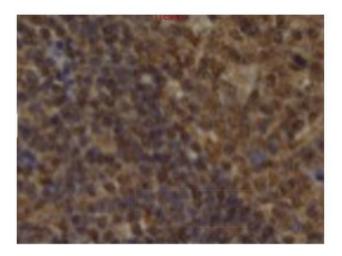
"intercrine/chemokine" family of cytokines, has been previously shown to be chemotactic for monocytes and T cells of memory/helper phenotype. RANTES has been shown to cause the release of histamine from basophils and activates eosinophils. It also binds to CCR1, CCR3, CCR4 and CCR5. This CC-chemokine enhances antigen-specific T helper (Th) type-1 responses against HIV-1. CC chemokines are small inducible proteins that are related to interleukin 8. In lung adenocarcinoma, RANTES is a predictor of survival while that of interleukin (IL)-8 is associated with a poor prognosis. In several models, tumorigenesis is abolished by RANTES, while it is facilitated by IL-8. Site-directed mutagenesis indicated that regulation of RANTES promoter activity required two nuclear factor (NF)-kappaB response elements but not its

activator protein (AP)-1 binding sites.

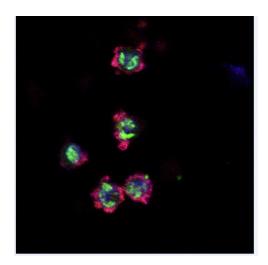
Synonyms: C-C motif chemokine 5, D17S136E, SCYA5, Small-inducible cytokine A5, SIS-delta, EoCP



# **Product images:**



Formalin-Fixed, Paraffin-Embedded Sections of Human tonsil stained with RANTES Antibody Cat.-No SM1416P at 10 ug/ml



This antibody stained PBMC. The primary antibody was incubated at 10.0 ug/ml for one hour at room temperature followed by a fluorescent labeled secondary antibody. Protocol and staining provided by Dr. Lauren Binge, Laboratory of Prof. Charles Mackay, Monash Univeristy, Australia.