

Product Information

Anti-RANTES

produced in goat, affinity isolated antibody

Catalog Number **R125**

Product Description

Anti-RANTES was produced in goats immunized with purified, *E. coli*-derived, recombinant human RANTES as the immunogen. RANTES specific IgG was purified by RANTES affinity chromatography.

Anti-RANTES may be used for the localization and detection of human RANTES. The antibody can neutralize the biological activity of human RANTES and be used in ELISA, immunoblotting, immunohistochemistry, and immunofluorescence. Based on ELISA, the antibody has ~40% cross-reactivity with recombinant mouse RANTES and recombinant canine RANTES, ~20% cross-reactivity with recombinant cotton rat RANTES, and ~1% cross-reactivity with recombinant feline RANTES.

RANTES (**R**egulated upon **A**ctivation, **N**ormal **T** cell **E**xpressed and presumably **S**ecreted), was initially discovered by subtractive hybridization as a transcript expressed in T cells, but not B cells. In addition to T-cells and platelets, RANTES is produced by renal tubular epithelium, synovial fibroblasts, and selected tumor cells. RANTES cDNA encodes a highly basic 91 amino acid residue precursor polypeptide with a 23 residue hydrophobic signal peptide that is cleaved to generate the 68 residue mature protein. Human and mouse RANTES share ~85% sequence homology and exhibit cross-species activities.

Reagent

Supplied lyophilized from a 0.2 µm filtered solution in phosphate buffered saline (PBS) with 5% trehalose.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

Reconstitute the contents of the vial with 0.5 mL sterile PBS to yield an antibody concentration of 0.2 mg/mL.

Storage/Stability

Prior to reconstitution, store tightly sealed at -20 °C. After reconstitution and for continuous use, the antibody can be stored at 2-8 °C for up to one month. For extended storage, reconstituted solution may be frozen in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended.

Product Profile

Neutralization : Neutralization Dose₅₀ (ND₅₀) is defined as the concentration of antibody required to yield one-half maximal inhibition of the cytokine activity on a responsive cell line, when that cytokine is present at a concentration just high enough to elicit a maximum response. The ND₅₀ is 0.1-0.4 µg/mL in the presence of 0.01 µg/mL of recombinant human RANTES, using human CCR5 transfected BAF3 cells.

Immunoblotting: a working concentration of 0.1 µg/mL is recommended to detect human RANTES. The detection limit is 1 ng/lane under non-reducing and reducing conditions.

Immunohistochemistry and immunofluorescence: a working dilution of 5-15 µg/mL is recommended using tissue or individual cells.^{3,4}

Note: In order to obtain the best results in various techniques and preparations, we recommend determining optimal working concentrations by titration.

References

1. Barnes, D.A., et al., *J. Clin. Invest.*, **101**, 2910-2919 (1998).
2. Leith, J.G., et al., *AIDS* **11**, 575-580 (1997).
3. Anderson, U., et al., *Eur. J. Immunol.*, **18**, 2081-2084 (1988).
4. Bjork, L., et al., *J. Immunol. Methods*, **175**, 201-213 (1994).

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