



Product Information Sheet

Polyclonal Anti-C-C Chemokine Receptor 5, **CCR5**

Catalogue No. PA1016

Lot No. 05B01

Ig type: rabbit IgG

Size: 100µg/vial

Specificity

Human, rat.

No cross reactivity with other proteins.

Recommended application

Western blot

Immunohistochemistry(P)

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminal of human CCR5, different from the related rat sequence by two amino acids.

Purity

Immunogen affinity purified.

Application

Western blot

At 0.5-1µg/ml with the appropriate system to detect CCR5 in cells and tissues.

Immunohistochemistry(P)

At 1-2µg/ml to detect CCR5 in formalin fixed and paraffin embedded tissues. Boiling the sections is required.

Other applications have not been tested.

Optimal dilutions should be determined by end user.

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Reconstitution

0.2ml of distilled water will yield a concentration of 500µg/ml.

To reorder contact us at:

Antagene, Inc.

Toll Free: 1(866)964-2589

email: Info@antageneinc.com

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for longer time.

BACKGROUND

Human CC chemokine receptor 5 (CCR5), which is 17.5 kb from the CMKBR2 gene, encodes a 352-amino acid protein with a calculated molecular mass of 40,600 Da. It is organized into four exons and two introns.^{1,3} Human CCR5 is a co-receptor for macrophage-tropic strains of human immunodeficiency virus (HIV)-1 and is expressed by bone-marrow-derived cells. CCR5 is expressed on neurons, astrocytes, and microglia in the central nervous system, and on epithelium, endothelium, vascular smooth muscle and fibroblasts in other tissues.² Functionally, CCR5 mediates the activation of cells by the chemokines macrophage inflammatory protein-1alpha, macrophage inflammatory protein-1beta, and RANTES, and serves as a fusion cofactor for macrophage-tropic strains of human immunodeficiency virus type 1.³

REFERENCE

1. Samson M, Labbe O, Mollereau C, Vassart G, Parmentier M. Molecular cloning and functional expression of a new human CC-chemokine receptor gene. *Biochemistry*. 1996 Mar 19; 35(11):3362-7.
2. Rottman JB, Ganley KP, Williams K, Wu L, Mackay CR, Ringler DJ. Cellular localization of the chemokine receptor CCR5. Correlation to cellular targets of HIV-1 infection. *Am J Pathol*. 1997 Nov; 151(5):1341-51.
3. Mummidi S, Ahuja SS, McDaniel BL, Ahuja SK. The human CC chemokine receptor 5 (CCR5) gene. Multiple transcripts with 5'-end heterogeneity, dual promoter usage, and evidence for polymorphisms within the regulatory regions and noncoding exons. *J Biol Chem*. 1997 Dec 5; 272(49):30662-71.