



Human CCR5 peptide (DAG-P0223)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	This gene encodes a member of the beta chemokine receptor family, which is predicted to be a seven transmembrane protein similar to G protein-coupled receptors. This protein is expressed by T cells and macrophages, and is known to be an important co-receptor for macrophage-tropic virus, including HIV, to enter host cells. Defective alleles of this gene have been associated with the HIV infection resistance. The ligands of this receptor include monocyte chemoattractant protein 2 (MCP-2), macrophage inflammatory protein 1 alpha (MIP-1 alpha), macrophage inflammatory protein 1 beta (MIP-1 beta) and regulated on activation normal T expressed and secreted protein (RANTES). Expression of this gene was also detected in a promyeloblastic cell line, suggesting that this protein may play a role in granulocyte lineage proliferation and differentiation. This gene is located at the chemokine receptor gene cluster region. Two transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jul 2008]
Specificity	Highly expressed in spleen, thymus, in the myeloid cell line THP-1, in the promyeloblastic cell line KG-1A and on CD4+ and CD8+ T-cells. Medium levels in peripheral blood leukocytes and in small intestine. Low levels in ovary and lung.
Purity	70 - 90% by HPLC.
Conjugate	Unconjugated
Sequence Similarities	Belongs to the G-protein coupled receptor 1 family.
Format	Liquid
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

Gene Name	CCR5 chemokine (C-C motif) receptor 5 (gene/pseudogene) [Homo sapiens (human)]
Official Symbol	CCR5
Synonyms	CCR5; chemokine (C-C motif) receptor 5 (gene/pseudogene); CKR5; CCR-5; CD195; CKR-5; CCCR5; CMKBR5; IDDM22; CC-CKR-5; C-C chemokine receptor type 5; chemr13; HIV-1 fusion coreceptor; chemokine receptor CCR5; C-C motif chemokine receptor 5 A159A;
Entrez Gene ID	1234
mRNA Refseq	NM_000579.3
Protein Refseq	NP_000570.1
UniProt ID	P51681
Chromosome Location	3p21.31
Pathway	Binding and entry of HIV virion, organism-specific biosystem; Chemokine receptors bind chemokines, organism-specific biosystem; Chemokine signaling pathway, organism-specific biosystem; Chemokine signaling pathway, conserved biosystem; Class A/1 (Rhodopsin-like receptors), organism-specific biosystem; Cytokine-cytokine receptor interaction, organism-specific biosystem; Cytokine-cytokine receptor interaction, conserved biosystem; Disease, organism-specific biosystem; Early Phase of HIV Life Cycle
Function	C-C chemokine binding; C-C chemokine receptor activity; C-C chemokine receptor activity; actin binding; chemokine (C-C motif) ligand 5 binding; chemokine receptor activity; coreceptor activity; phosphatidylinositol phospholipase C activity; protein bindin