

Anti-CCR5 Neutralizing Antibody (V3S-0622-YC4227)

Cat. No.: V3S-0622-YC4227

Summary

Description	This product is a monoclonal antibody derived from mouse, which can specifically recognize CCR5. The antibody is expressed with mammalian cell transient expression system, serum-free and purified by affinity chromatography. The purity and integrity are tested via SDS-PAGE and SEC-HPLC analysis. Given an antigen, additional QC measures are also desired such as affinity testing and binding validation. Specifically, the antibody is provided in multiple formats for in vivo and in vitro assays. The <i>In vivo</i> version features greater than 95% purity, ultra-low endotoxin levels (<1 EU/mg or 0.1 EU/mg), and is preservative, stabilizer, and carrier protein-free.
Clonality	Monoclonal
Host Species	Mouse
Target Species	Human
Immunogen	CCR5 expressing cells (CHO or LI.2)
Isotype	IgG
Isotype Control	C35500
Secondary Antibody	C47504; C37557; C41360; C32672; C10001

Property

Expression Species	HEK293F or CHO
Conjugation	None
Purity	>95%, determined by SDS-PAGE and/or SEC-HPLC
Endotoxin	<1 EU/mg, determined by LAL method
Purification	Protein A affinity purified
Sterility	0.2 µM filtered
Formulation	PBS, pH 7.4
Preservation	No preservatives
Stabilizer	No stabilizers
Storage	Store at 4°C within a week. For longer storage, aliquot and store at -20°C.

For lab research use only, not for diagnostic, therapeutic or any *in vivo* human use.

Applications

Application	FuncS
Application Notes	The antibody is recommended for detection of CCR5 by FuncS assay.

Target

Target	CCR5
Alternative Name	CCR5; chemokine (C-C motif) receptor 5 (gene/pseudogene); CKR5; CCR-5; CD195; CKR-5; CCCKR5; 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
Gene ID	1234
UniProt	P51681
Introduction	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 promyelocytic cell line, suggesting that this protein may play a role in granulocyte lineage proliferation and differentiation.
Related pathway	Cytokine Signaling in Immune system and Akt Signaling
Research Area	Neuroscience; Immunology
Proceedings of R&D	Diseases associated with CCR5 include West Nile Virus and Type 1 Diabetes Mellitus 22. Among its related pathways are Peptide ligand-binding receptors and Signaling by GPCR. Gene Ontology (GO) annotations related to this gene include G protein-coupled receptor activity and phosphatidylinositol phospholipase C activity. An important paralog of this gene is CCR2.

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