ARG11021
anti-CD195 / CCR5 antibody [HEK/1/85a/7a]

Package: 100 µg
Store at: -20°C

Summary

Product Description	Rat Monoclonal antibody [HEK/1/85a/7a] recognizes CD195 / CCR5
Tested Reactivity	Hu
Tested Application	FACS, FuncSt, ICC/IF
Host	Rat
Clonality	Monoclonal
Clone	HEK/1/85a/7a
Isotype	IgG2a, kappa
Target Name	CD195 / CCR5
Species	Human
Immunogen	CHO cells transfected with Human CCR5.
Conjugation	Un-conjugated
Alternate Names	CHEMR13; CD195; C-C chemokine receptor type 5; CKR-5; CCCKR5; CCR-5; CD antigen CD195; CKR5; CC-CKR-5; IDDM22; CCR5; CMKBR5; C-C CKR-5; HIV-1 fusion coreceptor

Application Instructions

Application table

Application	Dilution
FACS	Assay-dependent
FuncSt	Assay-dependent
ICC/IF	Assay-dependent

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS and 0.02% Sodium azide.
Preservative	0.02% Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	CCR5
Gene Full Name	chemokine (C-C motif) receptor 5 (gene/pseudogene)
Background	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. An allelic polymorphism in this gene results in both functional and non-functional alleles; the reference genome represents the functional allele. Two transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jul 2015]
Function	Receptor for a number of inflammatory CC-chemokines including MIP-1-alpha, MIP-1-beta and RANTES and subsequently transduces a signal by increasing the intracellular calcium ion level. May play a role in the control of granulocytic lineage proliferation or differentiation. Acts as a coreceptor (CD4 being the primary receptor) for HIV-1 R5 isolates. [UniProt]
Calculated Mw	41 kDa
PTM	Sulfated on at least 2 of the N-terminal tyrosines. Sulfation contributes to the efficiency of HIV-1 entry and is required for efficient binding of the chemokines, CCL3 and CCL4. O-glycosylated, but not N-glycosylated. Ser-6 appears to be the major site. Also sialylated glycans present which contribute to chemokine binding. Thr-16 and Ser-17 may also be glycosylated and, if so, with small moieties such as a T-antigen. Palmitoylation in the C-terminal is important for cell surface expression, and to a lesser extent, for HIV entry. Phosphorylation on serine residues in the C-terminal is stimulated by binding CC chemokines especially by APO-RANTES. [UniProt]