info@arigobio.com

ARG54318
anti-CD195 / CCR5 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes CD195 / CCR5
Tested Reactivity	Hu
Tested Application	IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	CD195 / CCR5
Species	Human
Immunogen	Peptide corresponding to aa 6-20 of 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
IHC-P	2-20 µg/ml
WB	1-2.5 µg/ml

Application Note: Western blot: use at 1:1,000 - 1:2,000 dilution.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Positive Control: THP-1

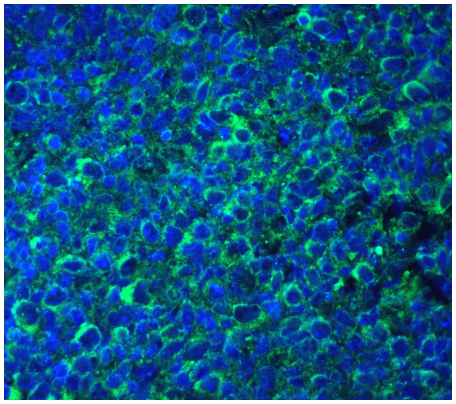
Properties

Form	Liquid
Purification	Immunoaffinity chroma-tography
Buffer	PBS (pH 7.4) 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

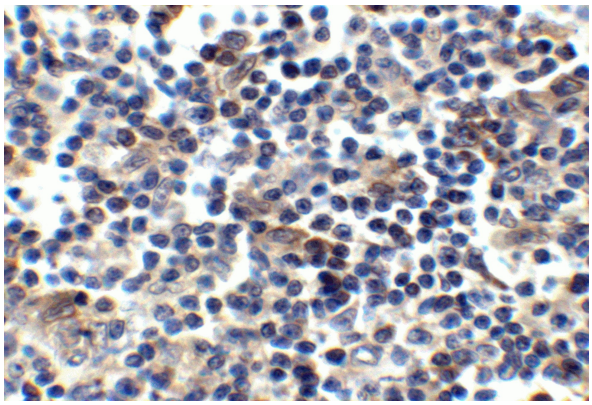
Database links	GeneID: 1234 Human Swiss-port # P51681 Human
Gene Symbol	CCR5
Gene Full Name	chemokine (C-C motif) receptor 5 (gene/pseudogene)
Background	Human immunodeficiency virus (HIV) and related viruses require coreceptors in addition to CD4 to infect target cells. Some G protein-coupled receptors including CCR5, CXCR4, CCR3, CCR2b, CCR8, GPR15, Bonzo, GPR1, and V28, have been identified as HIV coreceptors. Among them, CCR5 is a principal coreceptor for macrophage- and dual-tropic HIV-1 strains. CCR5 is required for infection by HIV-1, HIV-2, and SIV. The β-chemokines RANTES, MIP-1α, and MIP-1β are the ligands for CCR5 and prevent infection by macrophage-tropic HIV-1. CCR5 associates with the surface CD4-gp120 of HIV complex and leads to membrane fusion and virus entry of target cells. The amino-terminal domain and the extracellular loops of CCR5 serve as HIV binding sites. Messenger RNA for CCR5 is expressed in lymphoid cells and tissues.
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]
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody; Immune System antibody; Microbiology and Infectious Disease antibody; Neuroscience antibody; Signaling Transduction antibody
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.

Images



ARG54318 anti-CD195 / CCR5 antibody IHC-P image

Immunohistochemistry: Human lymph node stained with ARG54318 anti-CD195 / CCR5 antibody at 20 µg/ml dilution.



ARG54318 anti-CD195 / CCR5 antibody IHC-P image

Immunohistochemistry: Human lymph node stained with ARG54318 anti-CD195 / CCR5 antibody at 2.5 µg/ml dilution.