

## CD195 / CCR-5 Monoclonal Mouse Antibody (12D1)

## **Product Description**

Reacts with the N-terminal extracellular domain of CD195. The CC chemokine receptor 5 (CCR5) is a member of the CC-chemokine receptor family, and has the characteristic structure of a 7 transmembrane G protein-coupled receptor (GPCR). CCR5 regulates trafficking and effector functions of memory/effector Th1 cells, macrophages, NK cells, and immature dendritic cells. CCR5 and its ligands play an important role in viral pathogenesis. CCR5 represents the co-receptor for macrophage (M) and dual (T cell and M)-tropic immunodeficiency viruses. Together with the CD4 binding receptor, CCR5 plays a critical role in HIV entry into the target cells. Moreover, the CCR5 ligands macrophage inflammatory protein (MIP)-1 alpha, MIP-1 beta and RANTES act as endogenous inhibitors of HIV infection, making both CCR5 and its chemokine ligands attractive therapeutic targets for HIV infection. Recent studies have also highlighted the role of CCR5 in a variety of other human diseases, ranging from infectious and inflammatory diseases to cancer

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

**Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email <a href="mailto:order@biotium.com">order@biotium.com</a> to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 0156, Anti-CCR-5|CD195 (12D1)

## Droduct attributes

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Product attributes				
Antibody number	#0156			
Antibody reactivity (target)	CCR-5, CD195			
Antibody type	Primary			
Host species	Mouse			
Clonality	Monoclonal			
Clone	12D1			
Isotype	IgG2a, kappa			
Molecular weight	45 kDa			
Synonyms	CC Chemokine Receptor Type 5; CC-CKR-5; CCCKR5; CCR5; Chemokine CC molif receptor 5; Chemokine receptor CCR5; CHEMR13; CKR5; CMKBR5; HIV-1 fusion coreceptor; IDDM22; MIP-1 alpha receptor			
Human gene symbol	CCR5			
Entrez gene ID	1234			
SwissProt	P51681			
Unigene	450802			
Immunogen	Human native CCR5 protein			
Antibody target cellular localization	Plasma membrane			
Verified antibody applications	Flow (verified), IF (verified), IHC (FFPE) (verified)			
Species reactivity	Human			
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence 0.5-1 ug/mL. Immunohistology Frozen 0.5-1.0 ug/mL, Flow Cytometry 0.5-1 ug/million cells/0.1 mL, Optimal dilution for a specific application should be determined by user.			
Positive control	Human lymph node and tonsil.			
Shipping condition	Room temperature			
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C			
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended			
Regulatory status	For research use only (RUO)			
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide			
Antibody research areas	Immunology			
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.			
Cell/tissue expression	Dendritic cells, Monocytes/macrophages, NK cells, T-cells			

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405	CF®405S Features
BNC88	CF®488A	490/515	488	GFP, FITC	CF®488A Features
BNC68	CF®568	562/583	532, 561	RFP, TRITC	CF®568 Features
BNC94	CF®594	593/614	561	Texas Red®	CF®594 Features
BNC40	CF®640R	642/662	633-640	Cy®5	CF®640R Features
BNC47	CF®647	650/665	633-640	Cy®5	CF®647 Features
BNC74	CF®740	742/767	633-685	775/50	CF®740 Features
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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