

Datasheet: MCA6126APC

Description:	MOUSE ANTI HUMAN CD184:APC
Specificity:	CD184
Other names:	CXCR4
Format:	APC
Product Type:	Monoclonal Antibody
Clone:	12G5
Isotype:	IgG2a
Quantity:	100 TESTS/1ml

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	■			Neat

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

Target Species

Human

Species Cross Reactivity

Reacts with: Primate

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG conjugated to Allophycocyanin (APC) - liquid

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	APC	650	661

Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative	<0.1% Sodium Azide (NaN ₃)
Stabilisers	0.2% Bovine Serum Albumin
Immunogen	CP-MAC-infected Sup-T1 cells
External Database Links	<p>UniProt: P61073 Related reagents</p> <p>Entrez Gene: 7852 CXCR4 Related reagents</p>
Specificity	<p>Mouse anti Human CD184 clone 12G5, recognizes CD184 also known as C-X-C chemokine receptor 4 (CXCR4) and fusion which is a G-protein-coupled chemokine receptor. It has an extracellular N-terminus, a 7-transmembrane structure with 7 helical regions connected by 6 membrane loops and a cytoplasmic C-terminus. It is expressed in a number of hematopoietic cells including hematopoietic stem cells, T cells, B cells, monocytes, macrophages, neutrophils and eosinophils (Teicher & Fricker 2010).</p> <p>CD184's ligand is C-X-C chemokine ligand 12 (CXCL12) which is also known as stromal cell-derived factor 1 (SDF-1). Upon binding of the ligand signaling events are initiated which can result in alterations in gene expression, actin polymerisation, cell skeleton rearrangement and cell migration (Domanska et al. 2013). Via these pathways CD184 plays a role in homing hematopoietic stem and progenitor cells in bone marrow and mobilizes the cells to the periphery during stress or injury (Pawig et al. 2015). As well as homeostatic processes, CD184 has also been linked with various pathologies, including systemic lupus erythematosus, rheumatoid arthritis, multiple sclerosis and tumorigenesis. Its expression in CD4+ T cells has also shown that it acts as a natural co-receptor for HIV type I by assisting with triggering membrane fusion of the virus to the target cell (Feng et al. 1996).</p> <p>Clone 12G5 has been used in flow cytometry experiments to examine CD184 cell surface expression in cells modified to express Δ20 IFNITM2, an IFN-induced transmembrane protein which is known for its ability to inhibit the binding of several human viruses (Wu et al. 2017).</p>
Purity	>95% by SDS PAGE
Flow Cytometry	Use 10ul of the suggested working dilution to label 1x10 ⁶ cells in 100ul
Storage	<p>Store at +4°C. DO NOT FREEZE.</p> <p>This product should be stored undiluted. This product is photosensitive and should be protected from light.</p>
Guarantee	Guaranteed for 12 months from the date of despatch or until the date of expiry, whichever comes first. Please see label for expiry date.
Health And Safety	Material Safety Datasheet documentation #10041 available at:

Information <https://www.bio-rad-antibodies.com/SDS/MCA6126APC>
10041

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:APC \(MCA929APC\)](#)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com	Worldwide	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com	Europe	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com
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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)
'M401922:220718'

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