

## Datasheet: MCA6126PE

<b>Description:</b>	MOUSE ANTI HUMAN CD184:RPE
<b>Specificity:</b>	CD184
<b>Other names:</b>	CXCR4
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	12G5
<b>Isotype:</b>	IgG2a
<b>Quantity:</b>	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](http://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 R. Phycoerythrin (RPE) - liquid

#### Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
RPE 488nm laser	496	578
RPE 561nm laser	546	578

#### Preparation

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

<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative</b>	<0.1% Sodium Azide (NaN <sub>3</sub> )
<b>Stabilisers</b>	0.2% Bovine Serum Albumin
<b>Immunogen</b>	CP-MAC-infected Sup-T1 cells
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P61073</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">7852</a>    CXCR4    <a href="#">Related reagents</a></p>
<b>Specificity</b>	<p><b>Mouse anti Human CD184 clone 12G5</b>, 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 (<a href="#">Teicher &amp; Fricker 2010</a>).</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 (<a href="#">Domanska et al. 2013</a>). 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 (<a href="#">Pawig et al. 2015</a>). 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 (<a href="#">Feng et al. 1996</a>).</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 (<a href="#">Wu et al. 2017</a>).</p>
<b>Purity</b>	>95% by SDS PAGE
<b>Flow Cytometry</b>	Use 10ul of the suggested working dilution to label 1x10 <sup>6</sup> cells in 100ul
<b>Storage</b>	<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>
<b>Guarantee</b>	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  
Information**

Material Safety Datasheet documentation #10041 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA6126PE>  
10041

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG2a NEGATIVE CONTROL:RPE \(MCA929PE\)](#)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

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Email: [antibody\\_sales\\_de@bio-rad.com](mailto:antibody_sales_de@bio-rad.com)

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)

'M401923:220718'

**Printed on 12 Aug 2023**

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