Datasheet: MCA6126 BATCH NUMBER 159273

Description:	MOUSE ANTI HUMAN CD184
Specificity:	CD184
Other names:	CXCR4
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	12G5
Isotype:	lgG2a

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 <u>www.bio-</u> rad-antibodies.com/protocols				
		Yes	No	Not Determined	Suggested Dilution
	Flow Cytometry				
	Immunohistology - Paraffin				
	Functional Assays				
	Immunocytochemistry				
	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 a reactivity is derived from personal communications further information.	and workir testing wi s from the	ng conditic thin our la originator	ons may vary betwee boratories, peer-revi s. Please refer to ref	n species. Cross ewed publications or erences indicated for
Product Form	Purified IgG - liquid				
Preparation	Purified IgG prepared by supernatant	affinity ch	romatogra	aphy on Protein A fro	om tissue culture

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	<0.1% Sodium Azide (NaN ₃)
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	CP-MAC-infected Sup-T1 cells
External Database Links	UniProt:
	P61073 Related reagents
	Entrez Gene: <u>7852</u> CXCR4 <u>Related reagents</u>
Specificity	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 (<u>Teicher & Fricker 2010</u>).
	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 tumorogenesis. 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).
	Clone 12G5 has been used in flow cytometry experiments to examine CD184 cell surface expression in cells modified to express $\Delta 20$ IFNITM2, an IFN-induced transmembrane protein which is known for its ability to inhibit the binding of several human viruses (<u>Wu et al. 2017</u>).
Purity	>95% by SDS PAGE
Storage	Store at +4°C. DO NOT FREEZE. This product should be stored undiluted.
Guarantee	12 months from date of despatch
Health And Safety	Material Safety Datasheet documentation #10040 available at:

Information	https://www.bio-rad-antibodies.com/SDS/MCA6126 10040	
Regulatory	For research purposes only	

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87) <u>HRP</u>
Goat Anti Mouse IgG (STAR76)	RPE
Goat Anti Mouse IgG (STAR70)	FITC
Rabbit Anti Mouse IgG (STAR13)	HRP
Goat Anti Mouse IgG (Fc) (STAR120)	FITC, HRP
Rabbit Anti Mouse IgG (STAR9)	FITC
Goat Anti Mouse IgG (STAR77)	HRP
Goat Anti Mouse IgG (H/L) (STAR117)	Alk. Phos., DyLight®488, DyLight®550,
	DyLight®650, DyLight®680, DyLight®800,
	<u>FITC, HRP</u>

Recommended Negative Controls

MOUSE IgG2a NEGATIVE CONTROL (MCA929)

North & South	Tel: +1 800 265 7376 World	ldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
America	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-rad.com		Email: antibody_sales_uk@bio-rad.	com	Email: 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 'M377112:210212'

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