

Datasheet: MCA6118PE

Description:	MOUSE ANTI HUMAN CD140a:RPE
Specificity:	CD140a
Other names:	PDGFR- α
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	16A1
Isotype:	IgG1
Quantity:	100 TESTS/2ml

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		
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		
Buffer Solution	Phosphate buffered saline		
Preservative Stabilisers	<0.1% Sodium Azide (NaN ₃) 0.2% Bovine Serum Albumin		
Immunogen	CD140a-transfected NIH 3T3 cells		

**External Database
Links**

UniProt:

[P16234](#) [Related reagents](#)

Entrez Gene:

[5156](#) PDGFRA [Related reagents](#)

Specificity

Mouse anti Human CD140a, clone 16A1 recognizes CD140a also known as platelet-derived growth factor receptor alpha (PDGFR- α), is a 180 kDa single pass type I transmembrane glycoprotein and a member of the receptor tyrosine kinases ([Westermarck 1995](#)).

CD140a is largely expressed by mesenchymal cells and plays a key role in embryonic organogenesis and development via regulation of differentiation, migration pathways. ([Hoch & Sorian 2003](#)). Upregulation of this receptor has also been associated with various diseases including atherosclerosis, rheumatoid arthritis and nephritis ([Heldin & Westermarck 1999](#)).

Upon binding of one of its ligands, PDGF-AA, PDGF-BB or PDGF-AB, the receptor forms either a homo- or hetero-dimer with CD140b. This induces autophosphorylation of the receptors intracellular tyrosine residues which activates downstream signaling pathways such as Ras-MAPK, PI3K and PLC-Y ([Andrae et al. 2008](#)).

This clone 16A1 has been used in immunocytochemistry experiments to examine the co-localization of CD140a with tryptophan hydroxylase-2 in the myenteric plexus ([Coyle et al. 2016](#)).

Purity

>95% by SDS PAGE

Flow Cytometry

Use 20ul of the undiluted reagent to label 1×10^6 cells in 100ul

Storage

Store at +4°C. DO NOT FREEZE.

This product should be stored undiluted. This product is photosensitive and should be protected from light.

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
Information**

Material Safety Datasheet documentation #10041 available at:
<https://www.bio-rad-antibodies.com/SDS/MCA6118PE>
10041

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

North & South Tel: +1 800 265 7376

Worldwide 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

'M401891:220718'

Printed on 12 Aug 2023

© 2023 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)