

## Datasheet: MCA6118

**BATCH NUMBER 149840**

<b>Description:</b>	MOUSE ANTI HUMAN CD140a
<b>Specificity:</b>	CD140a
<b>Other names:</b>	PDGFR- $\alpha$
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	16A1
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.1 mg

## 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 - 1/50
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.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	<0.1% Sodium Azide ( $\text{NaN}_3$ )
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml

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- $\alpha$ ), 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 10ul of the suggested working dilution to label  $1 \times 10^6$  cells in 100ul

#### Storage

Store at +4°C. DO NOT FREEZE.  
This product should be stored undiluted.

#### Guarantee

12 months from date of despatch

#### Health And Safety Information

Material Safety Datasheet documentation #10040 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA6118>  
10040

#### Regulatory

For research purposes only

## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)

[HRP](#)

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

## Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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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://bio-rad-antibodies.com/datasheets)  
'M353604:190513'

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