

Datasheet: MCA6118

Description:	MOUSE ANTI HUMAN CD140a
Specificity:	CD140a
Other names:	PDGFR- α
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	16A1
Isotype:	IgG1
Quantity:	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.

	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.

Target Species	Human
Product Form	Purified IgG - liquid
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)
Approx. Protein Concentrations	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- 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 10ul of the suggested working dilution to label 1×10^6 cells in 100ul

Storage

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

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 #10040 available at:
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...) [HRP](#)

Rabbit Anti Mouse IgG (STAR12...) [RPE](#)

Goat Anti Mouse IgG (STAR70...) [FITC](#)

Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)
Goat Anti Mouse IgG (STAR76...) [RPE](#)
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),
[FITC](#), [HRP](#)
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)

Recommended Negative Controls

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

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
----------------------------------	---	------------------	---	---------------	---

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

'M401892:220718'

Printed on 18 Jul 2022

© 2022 Bio-Rad Laboratories Inc | [Legal](#) | [Imprint](#)