# Datasheet: 0100-0220 BATCH NUMBER 190115

| Description:  | MOUSE ANTI HUMAN CD140a |
|---------------|-------------------------|
| Specificity:  | CD140a                  |
| Other names:  | PDGF RECEPTOR ALPHA     |
| Format:       | Purified                |
| Product Type: | Monoclonal Antibody     |
| Clone:        | 35248 (57/20)           |
| Isotype:      | lgG1                    |
| 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 <u>www.bio-rad-antibodies.com/protocols</u>.

|                            | Yes | No | Not Determined | Suggested Dilution  |
|----------------------------|-----|----|----------------|---------------------|
| Immunohistology - Paraffin |     |    |                | 10µg/ml - 20µg/ml   |
| ELISA                      | -   |    |                | 0.5 µg/ml - 1 µg/ml |
| Western Blotting (1)       |     |    |                | 1 µg/ml - 2 µg/ml   |
| Immunofluorescence         |     |    |                |                     |
| Functional Assays (2)      |     |    | •              |                     |

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 the appropriate negative/positive controls.

(1)This antibody recognizes CD140a under non-reducing conditions.

(2)Removal of Sodium Azide is recommended prior to use in functional assays. The use of <u>EQU003</u> is recommended for this purpose.

| Target Species  | Human   |
|-----------------|---|
| Product Form    | Purified IgG - liquid   |
| Preparation     | Purified IgG prepared by affinity chromatography on Protein G |
| Buffer Solution | Phosphate buffered saline                                     |
| Preservative    | 0.09% Sodium Azide (NaN <sub>3</sub> )                        |

| Stabilisers                       | 5% Trehalose  |  |  |  |
|-----------------------------------|---|--|--|--|
| Approx. Protein<br>Concentrations | 1.0 mg/ml   |  |  |  |
| Immunogen                         | Purified recombinant human platelet-derived growth factor (PDGF) receptor alpha (extracellular domain), derived from the insect cell line Sf21.   |  |  |  |
| External Database<br>Links        | UniProt:<br><u>P16234</u> <u>Related reagents</u><br>Entrez Gene:<br><u>5156</u> PDGFRA <u>Related reagents</u>   |  |  |  |
| RRID                              | AB_2162480  |  |  |  |
| Specificity                       | <b>Mouse anti Human CD140a antibody, clone 35248</b> recognizes the human platelet-<br>derived growth factor receptor alpha, a 1089 amino acid, ~180 kDa single pass type I<br>transmembrane glycoprotein.  |  |  |  |
|                                   | PDGF is a major serum mitogen that can exist as a homo- or heterodimeric protein consisting of disulphide-linked PDGF-A and PDGF-B chains (Hart <i>et al.</i> 1990). The PDGF-AA, PDGF-BB and PDGF-AB isoforms have been shown to bind to two distinct cell surface PDGF receptors with different affinities. Whereas PDGF receptor alpha binds all three isoforms with high affinity, PDGF R beta binds PDGF-BB and AB but not PDGF-AA (Hart <i>et al.</i> 1988). Both PDGF receptor alpha and beta are members of the class III subfamily of receptor tyrosine kinases (Westermark 1995). |  |  |  |
|                                   | Mouse anti Human CD140a antibody, clone 35248 has been reported for use in functional studies. The ND50 was determined as 0.2-0.6 $\mu$ g/ml for blocking 10 ng/ml of PDGF-AA biological activity on a quiescent confluent cell culture of human WS1 cells.   |  |  |  |
| References                        | <ol> <li>De Paula, M.L. <i>et al.</i> (2014) The PTEN inhibitor bisperoxovanadium enhances<br/>myelination by amplifying IGF-1 signaling in rat and human oligodendrocyte progenitors.<br/><u>Glia. 62 (1): 64-77.</u></li> <li>Preisner, A. <i>et al.</i> (2015) Non-steroidal anti-inflammatory drug indometacin enhances<br/>endogenous remyelination. <u>Acta Neuropathol. 130 (2): 247-61.</u></li> <li>Kuroda, M. <i>et al.</i> (2017) Peripherally derived FGF21 promotes remyelination in the<br/>central nervous system. <u>J Clin Invest. 127 (9): 3496-509.</u></li> </ol>       |  |  |  |
| Storage                           | Store at +4°C or at -20°C if preferred.<br>Storage in frost-free freezers is not recommended.<br>This product should be stored undiluted. Avoid repeated freezing and thawing as this may<br>denature the antibody.   |  |  |  |
| Guarantee                         | 12 months from date of despatch   |  |  |  |

| Health And Safety<br>Information | Material Safety Datasheet documentation #10044 available at:<br>https://www.bio-rad-antibodies.com/SDS/0100-0220<br>10044 |
|----------------------------------|---|
| 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   |  |  |
| Rabbit Anti Mouse IgG (STAR13)                  | HRP   |  |  |
| Goat Anti Mouse IgG (STAR70)                    | <u>FITC</u>                                   |  |  |
| Goat Anti Mouse IgG (H/L) (STAR117)             | <u>Alk. Phos., DyLight®488, DyLight®550,</u>  |  |  |
|   | <u>DyLight®650, DyLight®680, DyLight®800,</u> |  |  |
|   | FITC, HRP                                     |  |  |
| Rabbit Anti Mouse IgG (STAR9)                   | <u>FITC</u>                                   |  |  |
| Goat Anti Mouse IgG (STAR77)                    | HRP   |  |  |
| Goat Anti Mouse IgG (Fc) (STAR120)              | FITC, HRP                                     |  |  |

| 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 'M362723:200528'

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