

Datasheet: MCA5700PE

### **BATCH NUMBER 165950**

| Description:            | RAT ANTI MOUSE CLEC2:RPE |
|-------------------------|--------------------------|
| Specificity:            | CLEC2                    |
| Other names:            | CLEC1B                   |
| Format:                 | RPE                      |
|                         |                          |
| Product Type:           | Monoclonal Antibody      |
| Product Type:<br>Clone: | Monoclonal Antibody 17D9 |
|                         | ,                        |

# **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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

|                | 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  | Mouse                             |                        |                     |
|-----------------|-----------------------------------|------------------------|---------------------|
| Product Form    | Purified IgG conjugate            | ed to R. Phycoerythrin | (RPE) - lyophilized |
| Reconstitution  | Reconstitute with 1ml             | distilled water        |                     |
| Max Ex/Em       | Fluorophore                       | Excitation Max (nm)    | Emission Max (nm    |
| RPE 4           | RPE 488nm laser                   | 496                    | 578                 |
| Preparation     | Purified IgG prepared supernatant | by affinity chromatog  | raphy on Protein G  |
| Buffer Solution | Phosphate buffered sa             | aline                  |                     |
| Preservative    | 0.09% Sodium Azide                | (NaN <sub>3</sub> )    |                     |
| Stabilisers     | 1% Bovine Serum Alb               | pumin                  |                     |

| Immunogei | n |
|-----------|---|
|-----------|---|

RBL-2H3 cells stably expressing HA-tagged mouse CLEC2.

### External Database Links

#### **UniProt**:

Q9JL99 Related reagents

#### **Entrez Gene:**

56760 Clec1b Related reagents

### **Synonyms**

Clec2

#### **Fusion Partners**

Spleen cells from immunised Wistar rats were fused with cells of the rat Y3 myeloma cell line.

#### **Specificity**

Rat anti Mouse CLEC2 antibody, clone 17D9 recognizes mouse C-type lectin domain family 1 member B, also known as CLEC2 or CLEC1B. CLEC2 acts as a receptor for rhodocytin, a platelet-aggregating protein found in snake venom. CLEC2 expression is not restricted to platelets and also acts as an activation receptor on neutrophils.

#### Flow Cytometry

Use 10ul of the suggested working dilution to label 1x10<sup>6</sup> cells in 100ul.

#### References

- 1. Mourão-sá, D. *et al.* (2011) CLEC-2 signaling via Syk in myeloid cells can regulate inflammatory responses. Eur J Immunol. 41 (10): 3040-53.
- 2. Mori, J. *et al.* (2012) Dominant role of the protein-tyrosine phosphatase CD148 in regulating platelet activation relative to protein-tyrosine phosphatase-1B. <u>Arterioscler</u> Thromb Vasc Biol. 32 (12): 2956-65.
- 3. Lowe, K.L. *et al.* (2015) The expression of mouse CLEC-2 on leucocyte subsets varies according to their anatomical location and inflammatory state. <u>Eur J Immunol. 45 (9):</u> 2484-93.
- 4. Nakamura-Ishizu A *et al.* (2015) CLEC-2 in megakaryocytes is critical for maintenance of hematopoietic stem cells in the bone marrow. J Exp Med. 212(12):2133-46.
- 5. Meinders, M. *et al.* (2016) Repercussion of Megakaryocyte-Specific Gata1 Loss on Megakaryopoiesis and the Hematopoietic Precursor Compartment. <u>PLoS One. 11 (5):</u> e0154342.
- 6. Hansen, M. *et al.* (2020) The RNA-Binding Protein ATXN2 is Expressed during Megakaryopoiesis and May Control Timing of Gene Expression. <u>Int J Mol Sci. 21 (3): 967.</u>
- 7. Kumode, T. *et al.* (2022) C-type lectin-like receptor 2 specifies a functionally distinct subpopulation within phenotypically defined hematopoietic stem cell population that contribute to emergent megakaryopoiesis. Int J Hematol. Feb 01 [Epub ahead of print].

# **Further Reading**

1. Kerrigan, A.M. *et al.* (2009) CLEC-2 is a phagocytic activation receptor expressed on murine peripheral blood neutrophils. <u>J Immunol</u>. 182 (7): 4150-7.

### Storage

Prior to reconstitution store at +4°C.

After reconstitution store at +4°C.

DO NOT FREEZE. This product should be stored undiluted. This product is photosensitive

and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.

| Guarantee                        | 12 months from date of despatch                                                                                                                                                    |
|----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Health And Safety<br>Information | Material Safety Datasheet documentation #20487 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA5700PE">https://www.bio-rad-antibodies.com/SDS/MCA5700PE</a> 20487 |
| Regulatory                       | For research purposes only                                                                                                                                                         |

# Related Products

# **Recommended Useful Reagents**

MOUSE SEROBLOCK FcR (BUF041A)
MOUSE SEROBLOCK FcR (BUF041B)

North & South Tel: +1 800 265 7376

Worldwide

Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Europe

Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50

**America** Fax: +1 919 878 3751

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 'M375597:210104'

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