

Datasheet: MCA1148

**BATCH NUMBER 159118**

|                      |                       |
|----------------------|-----------------------|
| <b>Description:</b>  | MOUSE ANTI HUMAN CD71 |
| <b>Specificity:</b>  | CD71                  |
| <b>Other names:</b>  | TRANSFERRIN RECEPTOR  |
| <b>Format:</b>       | Purified              |
| <b>Product Type:</b> | Monoclonal Antibody   |
| <b>Clone:</b>        | DF1513                |
| <b>Isotype:</b>      | IgG1                  |
| <b>Quantity:</b>     | 0.2 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             | ▪   |    |                | 1/10 - 1/25        |
| Immunohistology - Frozen   |     | ▪  |                |                    |
| Immunohistology - Paraffin |     | ▪  |                |                    |
| ELISA                      |     |    | ▪              |                    |
| Immunoprecipitation        |     |    | ▪              |                    |
| Western Blotting           |     |    | ▪              |                    |
| Immunofluorescence         | ▪   |    |                |                    |

Where this antibody 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 antibody for use in their own system using appropriate negative/positive controls.

|                                 |   |
|---------------------------------|---|
| <b>Target Species</b>           | Human   |
| <b>Species Cross Reactivity</b> | <p>Reacts with: Rhesus Monkey, Mustelid, Ferret</p> <p><b>N.B.</b> Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.</p> |
| <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>       | 0.09% Sodium Azide   |
| <b>Carrier Free</b>                   | Yes  |
| <b>Approx. Protein Concentrations</b> | IgG concentration 1.0 mg/ml  |
| <b>Immunogen</b>                      | KGI cell line.   |
| <b>External Database Links</b>        | <p><b>UniProt:</b><br/> <a href="#">P02786</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b><br/> <a href="#">7037</a>    TFRC    <a href="#">Related reagents</a></p>  |
| <b>RRID</b>                           | AB_1125283   |
| <b>Fusion Partners</b>                | Spleen cells from immunized BALB/c mice were fused with cells of the mouse NSI myeloma cell line.  |
| <b>Specificity</b>                    | <b>Mouse anti Human CD71 antibody, clone DF1513</b> recognizes the human CD71 cell surface antigen, a ~190 kDa homodimeric glycoprotein expressed by proliferating cells. CD71 is also known as the transferrin receptor. Mutation of the TFRC gene has been implicated in the development of Immunodeficiency 46 ( <a href="#">IMD46</a> ) a combined immunodeficiency characterized by early onset chronic diarrhea, recurrent infections and intermittent neutropenia and thrombocytopenia ( <a href="#">Jabara et al. 2016</a> )   |
| <b>Flow Cytometry</b>                 | Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.  |
| <b>References</b>                     | <ol style="list-style-type: none"> <li>Sopper, S. <i>et al.</i> (1997) Lymphocyte subsets and expression of differentiation markers in blood and lymphoid organs of rhesus monkeys. <a href="#">Cytometry. 29 (4): 351-62.</a></li> <li>Martel, C.J. &amp; Aasted, B. (2009) Characterization of antibodies against ferret immunoglobulins, cytokines and CD markers. <a href="#">Vet Immunol Immunopathol. 132:109-15.</a></li> <li>Meng, J. <i>et al.</i> (2011) Contribution of human muscle-derived cells to skeletal muscle regeneration in dystrophic host mice. <a href="#">PLoS One. 6(3):e17454.</a></li> <li>Stockwin, L.H. <i>et al.</i> (2009) Artemisinin dimer anticancer activity correlates with heme-catalyzed reactive oxygen species generation and endoplasmic reticulum stress induction. <a href="#">Int J Cancer. 125: 1266-75.</a></li> <li>Janes, P.W. <i>et al.</i> (1999) Aggregation of lipid rafts accompanies signaling via the T cell antigen receptor. <a href="#">J Cell Biol. 147: 447-61.</a></li> <li>Makoveichuk, E. <i>et al.</i> (2012) Inactivation of lipoprotein lipase occurs on the surface of THP-1 macrophages where oligomers of angiopoietin-like protein 4 are formed. <a href="#">Biochem</a></li> </ol> |

[Biophys Res Commun. 425:138-43.](#)

7. Procaccini, C. *et al.* (2012) Leptin-induced mTOR activation defines a specific molecular and transcriptional signature controlling CD4+ effector T cell responses. [J Immunol. 189: 2941-53.](#)

8. Weissgerber, P. *et al.* (2003) Investigation of mechanisms involved in phagocytosis of Legionella pneumophila by human cells. [FEMS Microbiol Lett. 219 \(2\): 173-9.](#)

9. Trakarnsanga, K. *et al.* (2017) An immortalized adult human erythroid line facilitates sustainable and scalable generation of functional red cells. [Nat Commun. 8: 14750.](#)

---

**Storage** This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

---

**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/MCA1148>  
10040

---

**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 IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)  
Goat Anti Mouse IgG (STAR76...) [RPE](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR13...) [HRP](#)  
Goat Anti Mouse IgG (STAR70...) [FITC](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight®488](#), [DyLight®550](#),  
[DyLight®650](#), [DyLight®680](#), [DyLight®800](#),  
[FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR9...) [FITC](#)

### 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](mailto: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](mailto: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](mailto: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](http://bio-rad-antibodies.com/datasheets)

'M383021:210513'

