

## Datasheet: MCA1148PET

<b>Description:</b>	MOUSE ANTI HUMAN CD71:RPE
<b>Specificity:</b>	CD71
<b>Other names:</b>	TRANSFERRIN RECEPTOR
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	DF1513
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	25 TESTS

### 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

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.

#### Target Species

Human

#### Species Cross Reactivity

Reacts with: Rhesus Monkey, Mustelid, Ferret  
**N.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.

#### Product Form

Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized

#### Reconstitution

Reconstitute in 0.25 ml disilled water

#### Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
RPE 488nm laser	496	578

#### Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant.

<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative</b>	0.09% Sodium Azide
<b>Stabilisers</b>	1% Bovine Serum Albumin 5% Sucrose
<b>Immunogen</b>	KGI cell line.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">P02786</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">7037</a>    TFRC    <a href="#">Related reagents</a></p>
<b>RRID</b>	AB_2240401
<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 angiotensin-like protein 4 are formed. <a href="#">Biochem Biophys Res Commun. 425:138-43.</a></li> <li>Procaccini, C. <i>et al.</i> (2012) Leptin-induced mTOR activation defines a specific molecular and transcriptional signature controlling CD4+ effector T cell responses. <a href="#">J Immunol. 189: 2941-53.</a></li> <li>Weissgerber, P. <i>et al.</i> (2003) Investigation of mechanisms involved in phagocytosis of Legionella pneumophila by human cells. <a href="#">FEMS Microbiol Lett. 219 (2): 173-9.</a></li> </ol>

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.](#)

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**Storage** Prior to reconstitution store at +4°C. Following 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.

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**Guarantee** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #20487 available at: 20487: <https://www.bio-rad-antibodies.com/uploads/MSDS/20487.pdf>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

### Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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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://www.bio-rad-antibodies.com/datasheets)

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