

## Datasheet: MCA1148PE

<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>	100 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.

<b>Target Species</b>	Human		
<b>Species Cross Reactivity</b>	Reacts with: Rhesus Monkey, Mustelid, Ferret <b>N.B.</b> Antibody reactivity and working conditions may vary between species.		
<b>Product Form</b>	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized		
<b>Reconstitution</b>	Reconstitute with 1 ml distilled water		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	RPE 488nm laser	496	578
<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</b>	0.09% Sodium Azide		
<b>Stabilisers</b>	1% Bovine Serum Albumin 5% Sucrose		
<b>Immunogen</b>	KGI cell line.		

**External Database  
Links**

**UniProt:**

[P02786](#)   [Related reagents](#)

**Entrez Gene:**

[7037](#)   TFRC   [Related reagents](#)

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**Fusion Partners**   Spleen cells from immunized BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.

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**Specificity**   **Mouse anti Human CD71 antibody, clone DF1513** 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 ([IMD46](#)) a combined immunodeficiency characterized by early onset chronic diarrhea, recurrent infections and intermittent neutropenia and thrombocytopenia ([Jabara \*et al.\* 2016](#))

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**Flow Cytometry**   Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul.

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**References**

1. Sopper, S. *et al.* (1997) Lymphocyte subsets and expression of differentiation markers in blood and lymphoid organs of rhesus monkeys. [Cytometry. 29 \(4\): 351-62.](#)
2. Martel, C.J. & Aasted, B. (2009) Characterization of antibodies against ferret immunoglobulins, cytokines and CD markers. [Vet Immunol Immunopathol. 132:109-15.](#)
3. Meng, J. *et al.* (2011) Contribution of human muscle-derived cells to skeletal muscle regeneration in dystrophic host mice. [PLoS One. 6\(3\):e17454.](#)
4. Stockwin, L.H. *et al.* (2009) Artemisinin dimer anticancer activity correlates with heme-catalyzed reactive oxygen species generation and endoplasmic reticulum stress induction. [Int J Cancer. 125: 1266-75.](#)
5. Janes, P.W. *et al.* (1999) Aggregation of lipid rafts accompanies signaling via the T cell antigen receptor. [J Cell Biol. 147: 447-61.](#)
6. Makoveichuk, E. *et al.* (2012) Inactivation of lipoprotein lipase occurs on the surface of THP-1 macrophages where oligomers of angiopoietin-like protein 4 are formed. [Biochem 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.](#)

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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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**Shelf Life**   12 months from date of reconstitution.

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**Health And Safety Information**   Material Safety Datasheet documentation #10075 available at: 10075: <https://www.bio-rad-antibodies.com/uploads/MSDS/10075.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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