

## Datasheet: MCA1148

<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>	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 - 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</b>	IgG concentration 1.0 mg/ml

## Concentrations

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**Immunogen** KGI cell line.

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## 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

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

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## Shelf Life

18 months from date of despatch.

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**Health And Safety Information**      Material Safety Datasheet documentation #10040 available at:  
10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

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**Regulatory**                      For research purposes only

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## Related Products

### Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR76...)      [RPE](#)  
Goat Anti Mouse IgG IgA IgM (STAR87...) [Alk. Phos.](#), [HRP](#)  
Goat Anti Mouse IgG (H/L) (STAR117...) [Alk. Phos.](#), [DyLight@488](#), [DyLight@549](#),  
[DyLight@649](#), [DyLight@680](#), [DyLight@800](#),  
[FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR9...)      [FITC](#)  
Goat Anti Mouse IgG (STAR77...)      [HRP](#)  
Rabbit Anti Mouse IgG (STAR12...)      [RPE](#)  
Goat Anti Mouse IgG (Fc) (STAR120...) [FITC](#), [HRP](#)  
Rabbit Anti Mouse IgG (STAR8...)      [DyLight@800](#)  
Goat Anti Mouse IgG (STAR70...)      [FITC](#)  
Rabbit Anti Mouse IgG (STAR13...)      [HRP](#)  
Human Anti Mouse IgG1 (HCA036...)      [HRP](#)

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
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