

Datasheet: MCA1148EL

Description:	MOUSE ANTI HUMAN CD71:Low Endotoxin
Specificity:	CD71
Other names:	TRANSFERRIN RECEPTOR
Format:	Low Endotoxin
Product Type:	Monoclonal Antibody
Clone:	DF1513
Isotype:	IgG1
Quantity:	0.5 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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	-			1/10 - 1/25
Immunohistology - Frozen		•		
Immunohistology - Paraffin		•		
ELISA			•	
Immunoprecipitation			•	
Western Blotting			•	
Immunofluorescence	-			

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	Human
Species Cross Reactivity	Reacts with: Rhesus Monkey, Mustelid, Ferret <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.
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture

supernatant

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	None present
Carrier Free	Yes
Endotoxin Level	<0.01EU/µg
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
Immunogen	KGI cell line.
External Database Links	UniProt: P02786 Related reagents
	Entrez Gene:
	7037 TFRC Related reagents
RRID	AB_2201483
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the mouse NSI myeloma cell line.
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).
Flow Cytometry	Use 10μl of the diluted antibody to label 10 <sup>6</sup> cells in 100μl
References	<ol> <li>Sopper, S. <i>et al.</i> (1997) Lymphocyte subsets and expression of differentiation markers in blood and lymphoid organs of rhesus monkeys. Cytometry. 29 (4): 351-62.</li> <li>Janes, P.W. <i>et al.</i> (1999) Aggregation of lipid rafts accompanies signaling via the T cell antigen receptor. J Cell Biol. 147: 447-61.</li> <li>Weissgerber, P. <i>et al.</i> (2003) Investigation of mechanisms involved in phagocytosis of Legionella pneumophila by human cells. FEMS Microbiol Lett. 219 (2): 173-9.</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. Int J Cancer. 125: 1266-75.</li> <li>Martel, C.J. &amp; Aasted, B. (2009) Characterization of antibodies against ferret immunoglobulins, cytokines and CD markers. Vet Immunol Immunopathol. 132:109-15.</li> <li>Meng, J. <i>et al.</i> (2011) Contribution of human muscle-derived cells to skeletal muscle</li> </ol>

regeneration in dystrophic host mice. PLoS One. 6(3):e17454.

- 7. Procaccini, C. *et al.* (2012) Leptin-induced mTOR activation defines a specific molecular and transcriptional signature controlling CD4+ effector T cell responses. <u>J Immunol.</u> 189: 2941-53.
- 8. 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. <u>Biochem Biophys Res Commun.</u> 425:138-43.
- 9. Trakarnsanga, K. *et al.* (2017) An immortalized adult human erythroid line facilitates sustainable and scalable generation of functional red cells. <u>Nat Commun. 8: 14750.</u>

  10. Deng, K. *et al.* (2023) Application of *In vitro* transcytosis models to brain targeted

biologics. PLoS One. 18 (8): e0289970.

#### Storage Store at +4°C, DO NOT FREEZE.

This product should be stored undiluted. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10162 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1148EL">https://www.bio-rad-antibodies.com/SDS/MCA1148EL</a> 10162

**Regulatory** For research purposes only

## Related Products

## **Recommended Secondary Antibodies**

Rabbit Anti Mouse IgG (STAR12...)

Goat Anti Mouse IgG IgA IgM (STAR87...)

RPE

Goat Anti Mouse IgG (STAR76...)

RPE

Rabbit Anti Mouse IgG (STAR13...)

HRP

Goat Anti Mouse IgG (STAR70...)

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550,

DyLight®650, DyLight®680, DyLight®800,

FITC, HRP

Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP

Rabbit Anti Mouse IgG (STAR9...) FITC

Goat Anti Mouse IgG (STAR77...) HRP

**Recommended Negative Controls** 

MOUSE IgG1 NEGATIVE CONTROL:Low Endotoxin (MCA928EL)

 North & South
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
 Europe
 Tel: +49 (0) 89 8090 95 21

 America
 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
 Fax: +49 (0) 89 8090 95 50

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M408325:221011'

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