

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/ug		
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 10ul of the diluted antibody to label 10 <sup>6</sup> cells in 100ul.		
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>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 regeneration in dystrophic host mice. PLoS One. 6(3):e17454.</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>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>Makoveichuk, E. <i>et al.</i> (2012) Inactivation of lipoprotein lipase occurs on the surface of</li> </ol>		

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.

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** Material Safety Datasheet documentation #10162 available at:

Information 10162: https://www.bio-rad-antibodies.com/uploads/MSDS/10162.pdf

Regulatory For research purposes only

# Related Products

# **Recommended Secondary Antibodies**

Goat Anti Mouse IgG (STAR77...) **HRP** 

Rabbit Anti Mouse IgG (STAR12...) **RPE** 

Rabbit Anti Mouse IgG (STAR8...) DyLight®800

Goat Anti Mouse IgG (STAR76...)

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

Goat Anti Mouse IgG IgA IgM (STAR87...) Alk. Phos., HRP

Rabbit Anti Mouse IgG (STAR13...) **HRP** 

Goat Anti Mouse IgG (STAR70...) **FITC** 

Rabbit Anti Mouse IgG (STAR9...) **FITC** 

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

**RPE** 

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

FITC, HRP

#### **Recommended Negative Controls**

#### MOUSE IgG1 NEGATIVE CONTROL:Low Endotoxin (MCA928EL)

North & South Tel: +1 800 265 7376 Worldwide Fax: +1 919 878 3751 America

Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Europe

Tel: +49 (0) 89 8090 95 21

Email: antibody sales us@bio-rad.com

Email: antibody sales uk@bio-rad.com

Fax: +49 (0) 89 8090 95 50 Email: 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 'M364846:200529'

Printed on 17 Sep 2021