Datasheet: MCA1148GA

Description:	MOUSE ANTI HUMAN CD71
Specificity:	CD71
Other names:	TRANSFERRIN RECEPTOR
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	DF1513
Isotype:	IgG1
Quantity:	0.1 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.

	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.

Target Species	Human
Species Cross Reactivity	Reacts with: Rhesus Monkey, Mustelid, Ferret **N.B.** Antibody reactivity and working conditions may vary between species.
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Carrier Free	Yes
Approx. Protein	IgG concentration 1.0 mg/ml

Concentrations	
Immunogen	KGI cell line.
External Database Links	**UniProt:** P02786 Related reagents **Entrez Gene:** 7037 TFRC Related reagents
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 suggested working dilution to label 10^6 cells in 100ul.
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.
Storage	Store at +4^{o}C or at -20^{o}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.
Shelf Life	18 months from date of despatch.

Health And Safety Information	Material Safety Datasheet documentation #10040 available at: 10040: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
Regulatory	For research purposes only

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)

North & South America Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com

Worldwide Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com

Europe Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com

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