

Datasheet: MCA1965PE

Description:	MOUSE ANTI HUMAN CD91:RPE
Specificity:	CD91
Other names:	ALPHA-2 MACROGLOBULIN RECEPTOR
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	A2Mr alpha-2
Isotype:	IgG1
Quantity:	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.

	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.

Target Species	Human		
Product Form	Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized		
Reconstitution	Reconstitute with 1.0 ml distilled water		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578
Preparation	Purified IgG prepared by affinity chromatography on Protein G from		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide		
Stabilisers	1%	Bovine Serum Albumin	
	5%	Sucrose	
Immunogen	Purified alpha2 macroglobulin receptor		
External Database Links	UniProt: Q07954 Related reagents		

Entrez Gene:[4035](#) LRP1 [Related reagents](#)

Synonyms	A2MR, APR
Fusion Partners	Spleen cells from immunised Balb/c mice were fused with cells of the NS1 mouse myeloma cell line.
Specificity	Mouse anti Human CD91 antibody, clone A2Mr alpha-2 recognizes human CD91, also known as Prolow-density lipoprotein receptor-related protein 1, Alpha-2-macroglobulin receptor or apolipoprotein E receptor. CD91 is a 4525 amino acid protein post translationally cleaved into 3 subunits, a 85 kDa type I transmembrane carboxyl chain (LRP85) non-covalently bound to a 515 kDa extracellular N-terminal subunit (LRP515) containing multiple EGF-like and LDL-receptor Class A and Class B domains. Additionally, there is an intracellular domain (LRPICD) which can be cleaved from the transmembrane domain by gamma secretase (May et al. 2004). Clone A2Mr alpha-2 detects an epitope within the LRP515 chain. CD91 is a multifunctional protein involved in processes including the phagocytosis and endocytosis of apoptotic cells (Nilsson et al. 2012), clearance of activated serum alpha-2-macroglobulin (Kristensen et al. 1990), modulation of the inflammatory response (Staudt et al. 2013) and acts as a receptor for <i>Pseudomonas aeruginosa</i> exotoxin A (Kounnas et al. 1992). Mouse anti Human CD91, clone A2Mr alpha-2 has been used extensively for the detection of CD91 by flow cytometry and immunohistochemistry on formalin fixed paraffin embedded tissues (Bourazopoulou et al. 2009).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	1. Moestrup, S.K. <i>et al.</i> (1992) Distribution of the alpha 2-macroglobulin receptor/low density lipoprotein receptor-related protein in human tissues. Cell Tissue Res. 269 (3): 375-82. 2. Moestrup, S.K. & Hokland, P. (1992) Surface expression of the alpha 2-macroglobulin receptor on human malignant blood cells. Leuk Res. 16 (3): 227-34. 3. Chen, J.S. <i>et al.</i> (2010) Secreted Heat Shock Protein 90{alpha} Induces Colorectal Cancer Cell Invasion through CD91/LRP-1 and NF-{kappa}B-mediated Integrin {alpha}V Expression. J Biol Chem. 285: 25458-66. 4. Bourazopoulou, E. <i>et al.</i> (2009) Functional expression of the alpha 2-macroglobulin receptor CD91 in salivary gland epithelial cells. J Autoimmun. 33: 141-6. 5. Hvidberg, V. <i>et al.</i> (2005) Identification of the receptor scavenging hemopexin-heme complexes. Blood. 106: 2572-9. 6. Hodge, S. <i>et al.</i> (2006) Azithromycin increases phagocytosis of apoptotic bronchial epithelial cells by alveolar macrophages. Eur Respir J. 28 (3): 486-95. 7. Hodge, S. <i>et al.</i> (2007) Smoking alters alveolar macrophage recognition and phagocytic ability: implications in chronic obstructive pulmonary disease. Am J Respir Cell Mol Biol. 37: 748-55. 8. Pawluczyk, I.Z. <i>et al.</i> (2008) Perindoprilat modulates the activity of lipoprotein receptor-related protein in human mesangial cells. J Biol Chem. 283: 4588-94. 9. Cunningham, A.J. <i>et al.</i> (2012) Prolonged neutrophil dysfunction after <i>Plasmodium falciparum</i> malaria is related to hemolysis and heme oxygenase-1 induction. J Immunol. 189 (11): 5336-46. 10. Inage, E. <i>et al.</i> (2014) Critical Roles for PU.1, GATA1, and GATA2 in the expression of human FcεRI on mast cells: PU.1 and GATA1 transactivate FCER1A, and GATA2 transactivates FCER1A and MS4A2. J Immunol. 192 (8): 3936-46.
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.

Shelf Life	12 months from date of reconstitution.
Health And Safety Information	Material Safety Datasheet documentation #10075 available at: 10075: https://www.bio-rad-antibodies.com/uploads/MSDS/10075.pdf
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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