

Datasheet: MCA506A647

BATCH NUMBER 165926

Description:	RAT ANTI HUMAN CD235a:Alexa Fluor® 647
Specificity:	CD235a
Other names:	GLYCOPHORIN A
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	YTH89.1
Isotype:	IgG2b
Quantity:	100 TESTS/1ml

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 Alexa Fluor® 647 - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®647	650	665
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% Sodium Azide		
Stabilisers	1% Bovine Serum Albumin		
Approx. Protein	IgG concentration 0.05 mg/ml		

Concentrations

External Database

Links

UniProt:

[P02724](#) [Related reagents](#)

Entrez Gene:

[2993](#) GYPA [Related reagents](#)

Synonyms

GPA

RRID

AB_566660

Fusion Partners

Spleen cells from immunized DA rats were fused with cells of the Y3/Ag.1.2.3.

Specificity

Rat anti Human CD235a antibody, clone YTH89.1 recognizes glycophorin A, a major sialoglycoprotein of the human erythrocyte membrane.

Flow Cytometry

Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul.

References

1. Outram, S. *et al.* (1988) Erythromyeloid lineage fidelity is conserved in erythroleukaemia. [Leuk Res. 12 \(8\): 651-7.](#)
2. Jokiranta, T.S. & Meri, S. (1993) Biotinylation of monoclonal antibodies prevents their ability to activate the classical pathway of complement. [J Immunol. 151 \(4\): 2124-31.](#)
3. Hoang, T. *et al.* (1996) Opposing effects of the basic helix-loop-helix transcription factor SCL on erythroid and monocytic differentiation. [Blood. 87: 102-11.](#)
4. Babiker, A.A. *et al.* (2002) Transfer of prostasomal CD59 to CD59-deficient red blood cells results in protection against complement-mediated hemolysis. [Am J Reprod Immunol. 47 \(3\): 183-92.](#)
5. Lahlil, R. *et al.* (2004) SCL assembles a multifactorial complex that determines glycophorin A expression. [Mol Cell Biol. 24: 1439-52.](#)
6. Challier, J.C. *et al.* (2005) Immunocytological evidence for hematopoiesis in the early human placenta. [Placenta. 26: 282-8.](#)
7. Huang, Y.C. *et al.* (2009) Oral small-molecule tyrosine kinase inhibitor midostaurin (PKC412) inhibits growth and induces megakaryocytic differentiation in human leukemia cells. [Toxicol In Vitro. 23: 979-85.](#)
8. Tiziani, S. *et al.* (2009) Metabolomic profiling of drug responses in acute myeloid leukaemia cell lines. [PLoS One. 2009;4\(1\):e4251.](#)
9. Basu, S. (2010) Erythrocyte membrane defects and asymmetry in paroxysmal nocturnal hemoglobinuria and myelodysplastic syndrome. [Hematology. 15: 236-9.](#)
10. Saha, S. *et al.* (2011) Elevated levels of redox regulators, membrane-bound globin chains, and cytoskeletal protein fragments in hereditary spherocytosis erythrocyte proteome. [Eur J Haematol. 87: 259-66.](#)
11. Lucky AB *et al.* (2016) Plasmodium knowlesi Skeleton-Binding Protein 1 Localizes to the 'Sinton and Mulligan' Stipplings in the Cytoplasm of Monkey and Human Erythrocytes. [PLoS One. 11 \(10\): e0164272.](#)
12. Scanlon, V.M. *et al.* (2022) Multiparameter analysis of timelapse imaging reveals kinetics of megakaryocytic erythroid progenitor clonal expansion and differentiation. [Sci](#)

Storage This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

Guarantee 12 months from date of despatch

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Health And Safety Information Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA506A647>
10041

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[RAT IgG2b NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA6006A647\)](#)

Recommended Useful Reagents

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

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

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