Datasheet: MCA506A647T

BATCH NUMBER 165899

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:	25 TESTS/0.25ml

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 Stabilisers

0.09% Sodium Azide
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_1101583
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 1x10^6 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

	Rep. 12 (1): 16218.
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
Acknowledgements	This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchase product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or outlicensing@thermofisher.com
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA506A647T 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)

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

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

'M385745:210513'

Printed on 09 Feb 2024