

Datasheet: MCA2034A647

Description:	MOUSE ANTI RAT CD49f:Alexa Fluor® 647
Specificity:	CD49f
Other names:	INTEGRIN ALPHA 6 CHAIN, VLA-6
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	Mab-5A
Isotype:	IgG1
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 - 1/10
Immunofluorescence			▪	

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

Target Species	Rat		
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 (NaN ₃)		
Stabilisers	1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.05mg/ml		

Immunogen	Rat oesophageal carcinoma cell line B2T.
Fusion Partners	Spleen cells from immunized BALB/c mice were fused with cells of the mouse SP2/0 myeloma cell line.
Specificity	<p>Mouse anti Rat CD49f antibody, clone Mab-5A recognizes rat CD49f, also known as Integrin alpha-6, VLA-6 or CD49 antigen-like family member F. CD49f is a 1130 amino acid ~130 kDa single pass type 1 transmembrane glycoprotein which functions as a receptor for laminin when in association with either beta-1 or beta-4 integrins on platelets and epithelial cells respectively.</p> <p>Mouse anti Rat CD49f antibody, clone Mab-5A does not react with rat fibroblasts.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> 1. Paku, S. <i>et al.</i> (2004) 2-acetylaminofluorene dose-dependent differentiation of rat oval cells into hepatocytes: confocal and electron microscopic studies. Hepatology. 39: 1353-61. 2. Sanchez-Esteban, J. <i>et al.</i> (2006) Integrins beta1, alpha6, and alpha3 contribute to mechanical strain-induced differentiation of fetal lung type II epithelial cells via distinct mechanisms. Am J Physiol Lung Cell Mol Physiol. 290: L343-50. 3. D'Souza, R. <i>et al.</i> (2009) Disruption of tubulobulbar complex by high intratesticular estrogens leading to failed spermiation. Endocrinology. 150: 1861-9. 4. Krause, P. <i>et al.</i> (2010) Liver sinusoidal endothelial and biliary cell repopulation following irradiation and partial hepatectomy. World J Gastroenterol. 16: 3928-35. 5. Huang, E. <i>et al.</i> (2009) Characterization of rat hair follicle stem cells selected by vario magnetic activated cell sorting system. Acta Histochem Cytochem. 42: 129-36. 6. Stevenson, K.S. <i>et al.</i> (2009) Isolation, characterization, and differentiation of thy1.1-sorted pancreatic adult progenitor cell populations. Stem Cells Dev. 18: 1389-98. 7. Koenig, S. <i>et al.</i> (2006) Zonal hierarchy of differentiation markers and nestin expression during oval cell mediated rat liver regeneration. Histochem Cell Biol. 126: 723-34. 8. Chen, J. <i>et al.</i> (2009) Expression of laminin isoforms, receptors, and binding proteins unique to nucleus pulposus cells of immature intervertebral disc. Connect Tissue Res. 50: 294-306. 9. Patrick, J.C. & Wu, X. (2003) Integrin-mediated preadipocyte adhesion and migration on laminin-1. Ann Biomed Eng. 31 (5): 505-14. 10. Kurzrock, E.A. <i>et al.</i> (2008) Label-retaining cells of the bladder: candidate urothelial stem cells. Am J Physiol Renal Physiol. 294 (6): F1415-21. 11. Kudo, K.I. <i>et al.</i> (2020) Flow Cytometry Definition of Rat Mammary Epithelial Cell Populations and Their Distinct Radiation Responses. Radiat Res. 194 (1): 22-37.
Storage	<p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>This product should be stored undiluted. This product is photosensitive and should be protected from light.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.</p>

Guarantee 12 months from date of despatch

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

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA1209A647\)](#)

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