bio-techne® RDSYSTEMS

Human MCT1/SLC16A1 Antibody

Monoclonal Mouse IgG_{2A} Clone # 882616 Catalog Number: MAB8275

DESCRIPTION	
Species Reactivity	Human
Specificity	Stains human MCT1/SLC16A1 transfected cells but not irrelevant transfectants in flow cytometry.
Source	Monoclonal Mouse IgG _{2A} Clone # 882616
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	NS0 mouse myeloma cell line transfected with human MCT1/SLC16A1 Met1-Val500 Accession # P53985
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.			
	Recommended Concentration	Sample	
Flow Cytometry	0.25 μg/10 ⁶ cells	See Below	
CyTOF-ready	Ready to be labeled using established conjugation.	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA		
Flow Cytometry	Detection of MCT1/SLC16A1 in HEK293 Human Cell Line Transfected with Human MCT1/SLC16A1 and eGFP by Flow Cytometry. Mouse Anti- Human MCT1/SLC16A1 Monoclonal Antibody (Catalog # MAB8275) was detected in (A) HEK293 human embryonic kidney cell line transfected with human MCT1/SLC16A1 and eGFP or (B) Irrelevant transfectants followed by Allophycocyanin-conjugated Anti- Mouse IgG Secondary Antibody (Catalog # F0101B). View our protocol for Staining Membrane- associated Proteins.	
PREPARATION AND S	TORAGE	
Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.	
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.	
Stability & Storage	 Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months - 20 to -70 °C under sterile conditions after reconstitution. 	

6 months, -20 to -70 °C under sterile conditions after reconstitution

BACKGROUND

Solute Carrier, family 16, member 1 (SLC16A1) encodes Monocarboxylic Acid Transporter 1 (MCT1). MCT1 is a proton-linked monocarboxylate transporter that catalyzes the movement of many monocarboxylates, such as lactate and pyruvate, across the plasma membrane. MCT1 has been found to be important in lactate uptake in cancer cells, and blockade of MCT1 may inhibit lactate-induced HIF-1 activation (1).

References:

1. Sonveaux, P. et al (2012) PLoS ONE 7:e33418.

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