

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
Conjugate	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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	0.25-1 µg/10 ⁶ cells	HEK293 human embryonic kidney cell line transfected with human MCT1/SLC16A1 and eGFP

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

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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