

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Stains human MCT1/SLC16A1 transfected cells but not irrelevant transfectants in flow cytometry.
<b>Source</b>	Monoclonal Mouse IgG <sub>2A</sub> Clone # 882616
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	NS0 mouse myeloma cell line transfected with human MCT1/SLC16A1 Met1-Val500 Accession # P53985
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

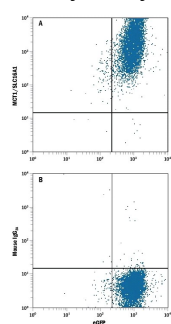
## APPLICATIONS

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Flow Cytometry</b>	0.25 µg/10 <sup>6</sup> cells	See Below
<b>CyTOF-ready</b>	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.** HEK293 human embryonic kidney cell line transfected with human MCT1/SLC16A1 and eGFP was stained with either (A) Mouse Anti-Human MCT1/SLC16A1 Monoclonal Antibody (Catalog # MAB8275) or (B) Mouse IgG<sub>2A</sub> Isotype Control (Catalog # MAB003) followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## 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.