

# Human MCT1/SLC16A1 Alexa Fluor® 405-conjugated Antibody

Monoclonal Mouse IgG<sub>2A</sub> Clone # 882616

Catalog Number: FAB8275V

100 µg

## 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<br>Met1-Val500<br>Accession # P53985                                                                                                                                                                                                                             |
| <b>Conjugate</b>          | Alexa Fluor 405<br>Excitation Wavelength: 405 nm<br>Emission Wavelength: 421 nm                                                                                                                                                                                                                                                  |
| <b>Formulation</b>        | Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details.<br><br>*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.

|                       | <b>Recommended Concentration</b> | <b>Sample</b>                                                                        |
|-----------------------|----------------------------------|--------------------------------------------------------------------------------------|
| <b>Flow Cytometry</b> | 0.25-1 µg/10 <sup>6</sup> cells  | HEK293 human embryonic kidney cell line transfected with human MCT1/SLC16A1 and eGFP |

## PREPARATION AND STORAGE

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

## PRODUCT SPECIFIC NOTICES

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