

DESCRIPTION

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| Species Reactivity | Human |
| Specificity | Detects HEK293 human embryonic kidney cell line transfected with human SLC5A8/SMCT1 by Flow Cytometry. Does not detect untransfected or irrelevant transfected HEK293 cells. |
| Source | Monoclonal Mouse IgG ₁ Clone # 903502 |
| Purification | Protein A or G purified from hybridoma culture supernatant |
| Immunogen | NS0 mouse myeloma cell line transfected with human SLC5A8/SMCT1 Met1-Leu610 Accession # NP_666018 |
| Conjugate | Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 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 | MCF-7 human breast cancer cell line and HEK293 human embryonic kidney cell line transfected with human SLC5A8/SMCT1 and eGFP |

PREPARATION AND STORAGE

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| 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

SLC5A8/SMCT1 (Solute Carrier family 5, member 8) is a member of the solute carrier family of multi-pass membrane proteins. SLC5A8 has been shown to transport iodide by a passive mechanism. It also transports monocarboxylates and short-chain fatty acids by a sodium-coupled mechanism. SLC5A8 nuclear translocation and loss of expression are associated with poor outcome in pancreatic ductal adenocarcinoma (1). It may be responsible for the absorption of D-lactate and monocarboxylate drugs from the intestinal tract.

References:

- Helm, J. *et al.* (2012) *Pancreas* **41**:904.

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