

DESCRIPTION

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
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or 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.

	Recommended Concentration	Sample
Flow Cytometry	0.25 µg/10 ⁶ cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA

<p>Flow Cytometry</p> <p>Detection of SLC5A8/SMCT1 in MCF-7 Human Cell Line by Flow Cytometry. MCF-7 human breast cancer cell line was stained with Mouse Anti-Human SLC5A8/SMCT1 Monoclonal Antibody (Catalog # MAB8398, filled histogram) or isotype control antibody (Catalog # MAB002, open histogram), followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B).</p>	<p>Flow Cytometry</p> <p>Detection of SLC5A8/SMCT1 in HEK293 Human Cell Line Transfected with Human SLC5A8/SMCT1 and eGFP by Flow Cytometry. HEK293 human embryonic kidney cell line transfected with human SLC5A8/SMCT1 and eGFP was stained with either (A) Mouse Anti-Human SLC5A8/SMCT1 Monoclonal Antibody (Catalog # MAB8398) or (B) Mouse IgG₁ Isotype Control (Catalog # MAB002) followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B).</p>
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PREPARATION AND STORAGE

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. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 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.

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:

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