

#### DESCRIPTION

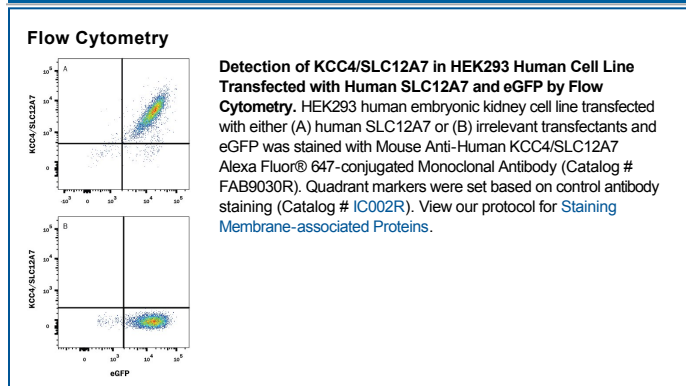
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human SLC12A7 in direct ELISAs.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 891526
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	NS0 mouse myeloma cell line transfected with human SLC12A7 Met1-Ser1083 Accession # Q9Y666
<b>Conjugate</b>	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
<b>Formulation</b>	Supplied 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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Flow Cytometry</b>	5 µL/10 <sup>6</sup> cells	See Below

#### DATA



#### 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> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, 2 to 8 °C as supplied.</li> </ul>

#### BACKGROUND

KCC4 (Potassium Chloride Cotransporter 4), also known as SLC12A7, is a 130-145 kDa member of the SLC12A family of ion transporter molecules. It is a 12-transmembrane, 1083 amino acid (aa), variably glycosylated protein that basically serves three functions: one, it acts as a membrane-bound scaffold for Ezrin-associated cytoskeletal organization; two, it is involved in salt resorption; and three, while inactive under isotonic conditions, it is activated during cell swelling, reducing intracellular ion concentration with a subsequent reduction in cell volume. On the cell surface, KCC4 presents as either a homooligomer, or a heterooligomer in a complex with KCC2 or NKCC1. Cell known to express KCC4 include PNS neurons, select CNS neurons, choroid plexus epithelium, proximal convoluted tubule and thick ascending loop of Henle epithelium, pancreatic islet α-cells, gastric parietal cells, α-intercalated cells of the renal collecting duct, and erythrocytes. The extracellular domains of human mouse KCC4 share 85% aa sequence identity.

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