

DESCRIPTION

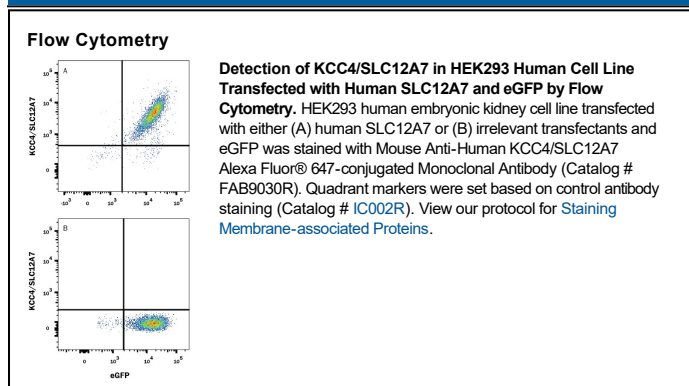
Species Reactivity	Human
Specificity	Detects human SLC12A7 in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 891526
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	NS0 mouse myeloma cell line transfected with human SLC12A7 Met1-Ser1083 Accession # Q9Y666
Conjugate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

	Recommended Concentration	Sample
Flow Cytometry	5 µL/10 ⁶ cells	See Below

DATA



PREPARATION AND STORAGE

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. ● 12 months from date of receipt, 2 to 8 °C as supplied.

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.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.