

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human SLC22A2 in direct ELISAs.
Source	Monoclonal Mouse IgG _{2A} Clone # 640438
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	NS0 mouse myeloma cell line transfected with human SLC-22A2 Accession # O15244
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.

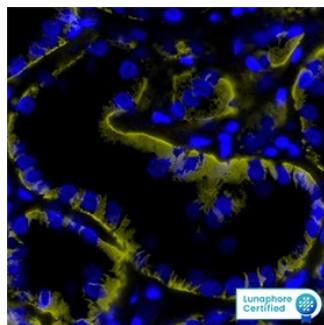
APPLICATIONS

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	HEK293 Human Cell Line Transfected with Human SLC22A2/OCT2 and eGFP
Multiplex Immunofluorescence	20 µg/mL	Immersion fixed paraffin-embedded sections of human kidney
Immunohistochemistry	8-25 µg/mL	See Below

DATA

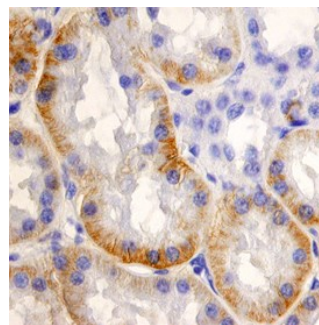
Multiplex Immunofluorescence



Detection of SLC22A2/OCT2 in Human Kidney via seqIF™ staining on COMET™

SLC22A2/OCT2 Antibody was detected in immersion fixed paraffin-embedded sections of human kidney using Mouse Anti-Human SLC22A2/OCT2, Monoclonal Antibody (Catalog # MAB6547) at 20ug/mL at 37 ° Celsius for 4 minutes. Before incubation with the primary antibody, tissue underwent an all-in-one dewaxing and antigen retrieval preprocessing using PreTreatment Module (PT Module) and Dewax and HIER Buffer H (pH 9; Eprelia Catalog # TA-999-DHBH). Tissue was stained using the Alexa Fluor™ 647 Goat anti-Mouse IgG Secondary Antibody at 1:200 at 37 ° Celsius for 2 minutes. (Yellow; Lunaphore Catalog # DR647MS) and counterstained with DAPI (blue; Lunaphore Catalog # DR100). Specific staining was localized to the membrane. Protocol available in COMET™ Panel Builder.

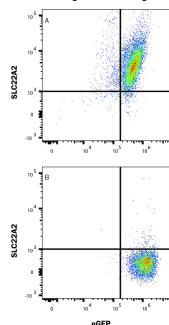
Immunohistochemistry



SLC22A2 in Human Kidney.

SLC22A2 was detected in immersion fixed paraffin-embedded sections of human kidney using Human SLC22A2 Monoclonal Antibody (Catalog # MAB6547) at 25 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to the cytoplasm of epithelial cells in convoluted tubules. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.

Flow Cytometry



Detection of SLC22A2/OCT2 in HEK293 Human Cell Line Transfected with Human SLC22A2/OCT2 and eGFP by Flow Cytometry. HEK293 human embryonic kidney cell line transfected with EGP and (A) human SLC22A2/OCT2 or (B) irrelevant protein was stained with Mouse Anti-Human SLC22A2/OCT2 Monoclonal Antibody (Catalog # MAB6547) followed by Allophycocyanin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0101B). Quadrant markers were set based on Mouse IgG2A Isotype Control (Catalog # MAB003). Staining was performed using our Staining Membrane-associated Proteins protocol.

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL. For liquid material, refer to CoA for concentration.
Shipping	Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <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

Solute carrier family 22 member 2 (SLC22A2; also hOCT2) is a 65 kDa member of the major facilitator superfamily and organic cation transporter family of proteins. Human SLC22A2 is synthesized as a multipass transmembrane protein that is 555 amino acids (aa) in length. Human SLC22A2 contains one potential site for N-linked glycosylation. There are also two additional isoforms for human SLC22A2. Isoform 2 has a 57 aa substitution for aa 427-483 and a deletion of the 72 aa at positions 484-555. Isoform 3 has an 18 aa substitution for aa 225-242 and a deletion of residues 243-555. SLC22A2 has its highest expression in the kidney. It is also expressed at lower levels in neurons of the cerebral cortex and in various subcortical nuclei.