10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SLC47A1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP5354b

Product Information

Application	IHC-P-Leica, WB, E
Primary Accession	Q96FL8
Other Accession	NP_060712.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB26908
Calculated MW	61922
Antigen Region	492-519

Additional Information

Gene ID	55244
Other Names	Multidrug and toxin extrusion protein 1, MATE-1, hMATE-1, Solute carrier family 47 member 1, SLC47A1, MATE1
Target/Specificity	This SLC47A1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 492-519 amino acids from the C-terminal region of human SLC47A1.
Dilution	IHC-P-Leica~~1:500 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	SLC47A1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SLC47A1 (HGNC:25588)
Function	Multidrug efflux pump that functions as a H(+)/organic cation antiporter (PubMed:16330770, PubMed:17509534). Plays a physiological role in the

	excretion of cationic compounds including endogenous metabolites, drugs, toxins through the kidney and liver, into urine and bile respectively (PubMed:16330770, PubMed:17495125, PubMed:17509534, PubMed:17582384, PubMed:18305230, PubMed:19158817, PubMed:21128598, PubMed:24961373). Mediates the efflux of endogenous compounds such as creatinine, vitamin B1/thiamine, agmatine and estrone-3-sulfate (PubMed:16330770, PubMed:17495125, PubMed:17509534, PubMed:17582384, PubMed:18305230, PubMed:19158817, PubMed:21128598, PubMed:24961373). May also contribute to regulate the transport of cationic compounds in testis across the blood-testis-barrier (Probable).
Cellular Location	Cell membrane; Multi-pass membrane protein. Apical cell membrane; Multi-pass membrane protein. Note=Localizes to the plasma membrane; at the brush border membranes of the proximal tubules (kidney) and at the bile caniculi (liver).
Tissue Location	Widely expressed. The highest expression is found in adrenal gland, and to a lower extent in liver, skeletal muscle and kidney. In testis, primarily localized throughout the adluminal compartment of the seminiferous tubules with expression at the peritubular myoid cells and Leydig cells (PubMed:35307651)

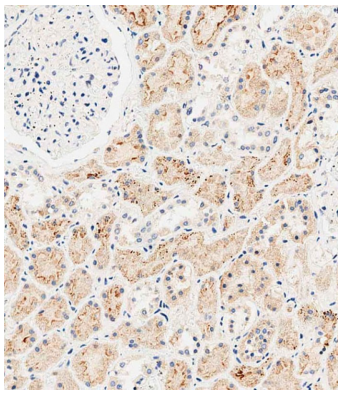
Background

SLC47A1 is located within the Smith-Magenis syndrome region on chromosome 17. It encodes a protein of unknown function.

References

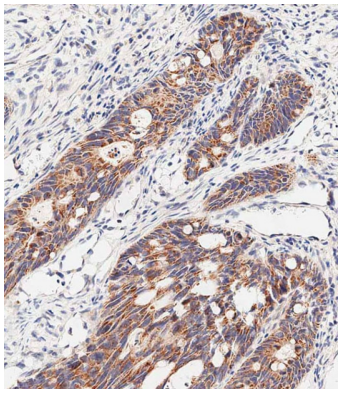
Toyama, K., et al. Pharmacogenet. Genomics 20(2):135-138(2010)
Becker, M.L., et al. Pharmacogenet. Genomics 20(1):38-44(2010)
Ha Choi, J., et al. Pharmacogenet. Genomics 19(10):770-780(2009)

Images

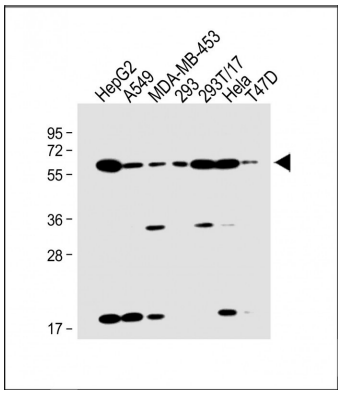


Immunohistochemical analysis of paraffin-embedded human kidney tissue using AP5354b performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the secondary antibody.

Immunohistochemical analysis of paraffin-embedded human colon carcinoma tissue using AP5354b performed on the Leica® BOND RXm. Tissue was fixed with formaldehyde at room temperature, antigen retrieval was by heat mediation with a EDTA buffer (pH9. 0). Samples were incubated with primary antibody(1:500) for 1 hours at room temperature. A undiluted biotinylated CRF Anti-Polyvalent HRP Polymer antibody was used as the



secondary antibody.



All lanes : Anti-SLC47A1 Antibody (C-term) at 1:2000 dilution Lane 1: HepG2 whole cell lysate Lane 2: A549 whole cell lysate Lane 3: MDA-MB-453 whole cell lysate Lane 4: 293 whole cell lysate Lane 5: 293T/17 whole cell lysate Lane 6: Hela whole cell lysate Lane 7: T47D whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 62 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.