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S47A2 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP4722a

Product Information

Application	WB, E
Primary Accession	Q86VL8
Reactivity	Human, Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB24979
Calculated MW	65085
Antigen Region	125-153

Additional Information

Gene ID	146802
Other Names	Multidrug and toxin extrusion protein 2, MATE-2, hMATE-2, Kidney-specific H(+)/organic cation antiporter, Solute carrier family 47 member 2, SLC47A2, MATE2
Target/Specificity	This S47A2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 125-153 amino acids from the N-terminal region of human S47A2.
Dilution	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	S47A2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	SLC47A2 (HGNC:26439)
Synonyms	MATE2
Function	Multidrug efflux pump that functions as a H(+)/organic cation antiporter.

	Mediates the efflux of cationic compounds, such as the model cations, tetraethylammonium (TEA) and 1-methyl-4-phenylpyridinium (MPP+), the platinum-based drug oxaliplatin or weak bases that are positively charged at physiological pH, cimetidine, the platinum-based drugs cisplatin and oxaliplatin or the antidiabetic drug metformin. Mediates the efflux of endogenous compounds such as, creatinine, thiamine and estrone-3-sulfate. Plays a physiological role in the excretion of drugs, toxins and endogenous metabolites through the kidney.
Cellular Location	Cell membrane; Multi-pass membrane protein. Apical cell membrane; Multi-pass membrane protein. Note=Detected in the renal urinary tubules.
Tissue Location	[Isoform 1]: High expression in kidney. Very small expression in adrenal gland and lung. [Isoform 6]: Ubiquitously expressed in all tissues examined except the kidney.

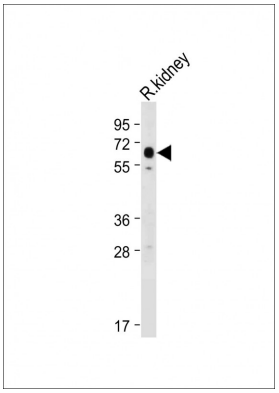
Background

S47A2 belongs to a family of transporters involved in excretion of toxic electrolytes, both endogenous and exogenous, through urine and bile. This transporter family shares homology with the bacterial MATE (multidrug and toxin extrusion) protein family responsible for drug resistance. This gene is one of two members of the MATE transporter family located near each other on chromosome 17.

References

Toyama, K., et al. Pharmacogenet. Genomics 20(2):135-138(2010)
Kajiwara, M., et al. J. Hum. Genet. 54(1):40-46(2009)
Ohta, K.Y., et al. J Pharm Pharm Sci 12(3):388-396(2009)

Images



Anti-S47A2 Antibody (N-term) at 1:500 dilution + rat kidney tissue lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 65 kDa Blocking/Dilution buffer: 5% NFDM/TBST.