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

S47A2 Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP4722a

Specification

S47A2 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Q86VL8

S47A2 Antibody (N-term) Blocking Peptide - 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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

S47A2 Antibody (N-term) Blocking Peptide - 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.

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S47A2 Antibody (N-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

S47A2 Antibody (N-term) Blocking Peptide - Images

S47A2 Antibody (N-term) Blocking Peptide - 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.

S47A2 Antibody (N-term) Blocking Peptide - 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)