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

SLCO1C1 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP18974b

Specification

SLCO1C1 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q9NYB5

SLCO1C1 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 53919

Other Names
Solute carrier organic anion transporter family member 1C1, Organic anion transporter F, OATP-F, Organic anion transporter polypeptide-related protein 5, OAT-RP-5, OATPRP5, Organic anion-transporting polypeptide 14, OATP-14, Solute carrier family 21 member 14, Thyroxine transporter, SLCO1C1, OATP14, OATP1C1, OATPF, SLC21A14

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.

SLCO1C1 Antibody (C-term) Blocking Peptide - Protein Information

Name SLCO1C1

Synonyms OATP14, OATP1C1, OATPF, SLC21A14

Function
Mediates the Na(+)-independent high affinity transport of organic anions such as the thyroid hormones L-thyroxine (T4), L- thyroxine sulfate (T4S), and 3,3',5'-triiodo-L-thyronine (reverse T3, rT3) at the plasma membrane (PubMed:12351693, PubMed:18566113, PubMed:19129463). Regulates T4 levels in different brain regions by transporting T4, and also by serving as an export pump for T4S, which is a source of T4 after hydrolysis by local sulfatases (PubMed:18566113). Increases the access of these substrates to the intracellular sites where they are metabolized by the deiodinases (PubMed:18566113). Other potential substrates, such as triiodothyronine (T3), 17-beta-glucuronosyl estradiol (17beta-estradiol 17-O-(beta-D- glucuronate)), estrone-3-sulfate (E1S) and sulfobromophthalein

(BSP) are transported with much lower efficiency (PubMed:12351693, PubMed:19129463). Transports T4 and E1S in a pH-insensitive manner (PubMed:19129463). Facilitates the transport of thyroid hormones across the blood-brain barrier and into glia and neuronal cells in the brain (PubMed:30296914).

Cellular Location
Cell membrane; Multi-pass membrane protein. Note=Expressed in both luminal and abluminal membranes of brain capillary endothelial cells. Localized to the apical membrane and basal surfaces of choroid plexus

Tissue Location
Highly expressed in brain and in Leydig cells in testis (PubMed:12351693, PubMed:35307651). Localized in nests of Leydig cells (at protein level) (PubMed:12351693). Expressed in choroid plexus (at protein level) (PubMed:18687783). Not strongly enriched in cerebral microvessels (PubMed:18687783).

SLCO1C1 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

SLCO1C1 Antibody (C-term) Blocking Peptide - Images

SLCO1C1 Antibody (C-term) Blocking Peptide - Background

This gene encodes a member of the organic aniontransporter family. The encoded protein is a transmembrane receptorthat mediates the sodium-independent uptake of thyroid hormones inbrain tissues. This protein has particularly high affinity for thethyroid hormones thyroxine, tri-iodothyronine and reversetri-iodothyronine. Polymorphisms in the gene encoding this proteinmay be associated with fatigue and depression in patients sufferingfrom hyperthyroidism. Alternative splicing results in multipletranscript variants.

SLCO1C1 Antibody (C-term) Blocking Peptide - References

Franke, R.M., et al. Pharmacogenomics 10(3):339-344(2009)Heuer, H., et al. Endocrinology 150(3):1078-1083(2009)Leuthold, S., et al. Am. J. Physiol., Cell Physiol. 296 (3), C570-C582 (2009) :Westholm, D.E., et al. Endocrinology 150(2):1025-1032(2009)Roberts, L.M., et al. Endocrinology 149(12):6251-6261(2008)