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SULT4A1a/b Antibody (N-term) Blocking Peptide

Synthetic peptide
Catalog # BP2610a

Specification

SULT4A1a/b Antibody (N-term) Blocking Peptide - Product Information

Primary Accession	Q9BR01
Other Accession	NP_795343

SULT4A1a/b Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 25830

Other Names
Sulfotransferase 4A1, ST4A1, 282-, Brain sulfotransferase-like protein, hBR-STL, hBR-STL-1, Nervous system sulfotransferase, NST, SULT4A1, SULTX3

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP2610a was selected from the N-term region of human SULT4A1a/b. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

SULT4A1a/b Antibody (N-term) Blocking Peptide - Protein Information

Name SULT4A1

Synonyms SULTX3

Function
Atypical sulfotransferase family member with very low affinity for 3'-phospho-5'-adenylyl sulfate (PAPS) and very low catalytic activity towards L-triiodothyronine, thyroxine, estrone, p-nitrophenol, 2-naphthylamine, and 2-beta-naphthol. May have a role in the metabolism of drugs and neurotransmitters in the CNS.

Cellular Location
Cytoplasm.

Tissue Location
Highly expressed in the cerebral cortex and frontal lobe, slightly less in the cerebellum, occipital and temporal lobes, relatively low in the medulla and putamen, and lowest in the spinal cord. No expression detected in the pancreas (PubMed:10698717). Highly expressed in fetal brain and occipital lobe, slightly less in the whole brain, frontal lobe, hippocampus, and lung, very low expression in cerebellum, medulla oblongata, temporal lobe, testis, kidney and appendix (PubMed:12039030).

SULT4A1a/b Antibody (N-term) Blocking Peptide - Protocols

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

- Blocking Peptides

SULT4A1a/b Antibody (N-term) Blocking Peptide - Images

SULT4A1a/b Antibody (N-term) Blocking Peptide - Background

Sulfotransferase enzymes catalyze the sulfate conjugation of many hormones, neurotransmitters, drugs, and xenobiotic compounds. These cytosolic enzymes are different in their tissue distributions and substrate specificities. The gene structure(number and length of exons) is similar among family members. SULT4A1 isoforms a and b are selectively expressed in brain tissue. Isoform a is the predominant of the two isoforms of this protein. Isoform b includes an alternate segment, compared to isoform a, that causes a frameshift. The resulting protein (isoform b) has a distinct and shorter C-terminus when compared to isoform a.

SULT4A1a/b Antibody (N-term) Blocking Peptide - References

Liyou, N.E., et al., J. Histochem. Cytochem. 51(12):1655-1664 (2003).Weinshilboum, R.M., et al., FASEB J. 11(1):3-14 (1997).Glatt, H., et al., Mutat. Res. 482 (1-2), 27-40 (2001).Sakakibara, Y., et al., Gene 285 (1-2), 39-47 (2002).Glatt, H., et al., Toxicol. Lett. 112-113, 341-348 (2000).