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SULT4A1 Rabbit pAb

Catalog # AP97398

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9BR01
Other Accession	Q9BR01
Reactivity	Rat
Predicted	Pig, Human, Mouse, Rabbit, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	33085
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SULT4A1
Epitope Specificity	221-284/284
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the sulfotransferase 1 family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Sulfation is an essential conjugation reaction that increases the water solubility of many compounds, thereby influencing their renal excretion and also resulting in the formation of active metabolites. SULT4A1 (sulfotransferase family 4A, member 1), whose alternative names include brain sulfotransferase-like protein, nervous system sulfotransferase, NST, SULTX3, hBR-STL-1, BRSTL1, BR-STL-1, MGC40032 and DJ388M5.3, is a 284 amino acid protein showing cytoplasmic localization. As a member of the sulfotransferase 1 family, SULT4A1 plays a role in elimination of xenobiotics, activation of procarcinogens and regulation of hormones. SULT4A1 is highly expressed in cerebral cortex and frontal lobe, with lower expression in cerebellum, temporal and occipital lobes. Two SULT4A1 isoforms exist to alternative splicing events. The gene encoding SULT4A1 maps to human chromosome 22q13.2, a region which has been implicated in predisposition to schizophrenia.

Additional Information

Gene ID	25830
Other Names	BR-STL-1; BRSTL1; DJ388M5.3; NST; SULTX3; hBR-STL-1; 2400007A17Rik; BR-STL; ST4A1; mBR-STL; Sulta41; ST4A1_HUMAN; SULT4A1; Brain sulfotransferase-like protein (hBR-STL | hBR-STL-1); Nervous system sulfotransferase (NST); 2.8.2.-; ST4A1_MOUSE; Brain sulfotransferase-like protein (mBR-STL); ST4A1_RAT; Brain sulfotransferase-like protein (rBR-STL); sulfotransferase family 4A member 1; sulfotransferase family 4A, member 1

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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).

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