

**SULT1B1 Antibody (C-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP2600b****Specification**

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**SULT1B1 Antibody (C-term) Blocking Peptide - Product Information**

Primary Accession [O43704](#)  
Other Accession [NP\\_055280](#)

**SULT1B1 Antibody (C-term) Blocking Peptide - Additional Information**

**Gene ID** 27284

**Other Names**

Sulfotransferase family cytosolic 1B member 1, ST1B1, Sulfotransferase 1B1, 282-, Sulfotransferase 1B2, ST1B2, Thyroid hormone sulfotransferase, SULT1B1, ST1B2, SULT1B2

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP2600b](/product/products/AP2600b) was selected from the C-term region of human SULT1B1. 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.

**SULT1B1 Antibody (C-term) Blocking Peptide - Protein Information**

**Name** SULT1B1

**Synonyms** ST1B2 {ECO:0000303|PubMed:9443824}, SULT

**Function**

Sulfotransferase that utilizes 3'-phospho-5'-adenylyl sulfate (PAPS) as sulfonate donor to catalyze the sulfate conjugation of dopamine, small phenols such as 1-naphthol and p-nitrophenol and thyroid hormones, including 3,3'-diiodothyronine, triiodothyronine (T3) and reverse triiodothyronine (rT3) (PubMed: [28084139](http://www.uniprot.org/citations/28084139), PubMed: [9443824](http://www.uniprot.org/citations/9443824), PubMed: [9463486](http://www.uniprot.org/citations/9463486)). May play a role in gut microbiota-host metabolic interaction. O-sulfonates 4-ethylphenol (4-EP), a dietary tyrosine- derived metabolite produced by gut bacteria.

The product 4-EPS crosses the blood-brain barrier and may negatively regulate oligodendrocyte maturation and myelination, affecting the functional connectivity of different brain regions associated with the limbic system (PubMed:<a href="http://www.uniprot.org/citations/35165440" target="\_blank">35165440</a>).

**Cellular Location**

Cytoplasm

**Tissue Location**

Highly expressed in the liver, peripheral blood leukocytes, colon (mucosal lining), small intestine (jejunum) and spleen. A lesser expression was observed in the lung, placenta and thymus.

**SULT1B1 Antibody (C-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

**SULT1B1 Antibody (C-term) Blocking Peptide - Images****SULT1B1 Antibody (C-term) Blocking Peptide - Background**

Sulfotransferases such as SULT1B1 catalyze the biotransformation of a large number of endogenous compounds such as neurotransmitters, steroids, bile acids, and thyroid hormones, as well as drugs and xenobiotics. Fujita et al. (1997) demonstrated that recombinant rat and human SULT1B1, expressed in *E. coli*, catalyzed sulfation of p-nitrophenol, 3,3-prime,5-triiodothyronine (T3), and dopamine, but not of beta-estradiol and dehydroepiandrosterone. SULT1B1 showed higher affinities for formation of T3 sulfate than did the phenol sulfotransferases ST1A3 (SULT1A1) or ST1A5. Wang et al. (1998) found that bacterially-expressed SULT1B1 sulfated small phenols such as 1-naphthol and p-nitrophenol and thyroid hormones, including 3,3-prime-diiodothyronine, triiodothyronine, reverse triiodothyronine, and thyroxine. No activity was detected against several sterols or dopamine.

**SULT1B1 Antibody (C-term) Blocking Peptide - References**

Fujita, K., et al., *J. Biochem.* 122: 1052-1061 (1997). Wang, J., et al., *Molec. Pharm.* 53: 274-282 (1998).