

SULT1C1 Antibody (Center) Blocking Peptide
Synthetic peptide
Catalog # BP2602b**Specification**

SULT1C1 Antibody (Center) Blocking Peptide - Product Information

Primary Accession [O00338](#)
Other Accession [NP_789795](#)

SULT1C1 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 6819

Other Names

Sulfotransferase 1C2, ST1C2, 282-, Sulfotransferase 1C1, SULT1C#1, humSULTC2, SULT1C2, SULT1C1

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP2602b](/product/products/AP2602b) was selected from the Center region of human SULT1C1. 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.

SULT1C1 Antibody (Center) Blocking Peptide - Protein Information

Name SULT1C2

Synonyms SULT1C1

Function

Sulfotransferase that utilizes 3'-phospho-5'-adenylyl sulfate (PAPS) to catalyze the sulfate conjugation of phenolic compounds (PubMed: [10481272](http://www.uniprot.org/citations/10481272), PubMed: [10783263](http://www.uniprot.org/citations/10783263), PubMed: [9852044](http://www.uniprot.org/citations/9852044)). Does not transfer sulfate to steroids, dopamine, acetaminophen, or alpha-naphthol (PubMed: [10481272](http://www.uniprot.org/citations/10481272), PubMed: [9852044](http://www.uniprot.org/citations/9852044)). Except in mitochondria, where it can add sulfate to cholesterol

producing cholesterol sulfate, which alters mitochondrial membrane organization, and impacts protein complex mobility increasing state-III respiration, thereby modulating mitochondrial respiration (By similarity). Catalyzes the sulfation of the carcinogenic N-hydroxy-2-acetylaminofluorene leading to highly reactive intermediates capable of forming DNA adducts, potentially resulting in mutagenesis (PubMed:9852044).

Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:O46503}. Lysosome {ECO:0000250|UniProtKB:Q9WUW8}. Mitochondrion {ECO:0000250|UniProtKB:Q9WUW8}

Tissue Location

Found in adult stomach, kidney and thyroid gland, and in fetal kidney and liver

SULT1C1 Antibody (Center) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

SULT1C1 Antibody (Center) Blocking Peptide - Images**SULT1C1 Antibody (Center) Blocking Peptide - Background**

The 296-amino acid human SULTC1 protein, so named on the basis of its significant homology to a rat hepatic cytosolic sulfotransferase ST1C1, catalyzes the sulfate conjugation of many drugs, xenobiotic compounds, hormones, and neurotransmitters, and may be involved in the activation of carcinogenic hydroxylamines. This enzyme also shows activity towards p-nitrophenol and N-hydroxy-2-acetylaminofluorene (N-OH-2AAF). SULT1C1 is expressed as a 1.4-kb mRNA in adult human stomach, kidney, and thyroid, and in fetal kidney and liver. By functional characterization of recombinant protein, it has been shown that SULT1C1 catalyzes the sulfonation of p-nitrophenol and N-hydroxy-2-acetylaminofluorene, but not dopamine, 17-beta-estradiol, or dehydroepiandrosterone.