

## **SULT1A1 Antibody (Center)**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21514c

### **Specification**

## **SULT1A1 Antibody (Center) - Product Information**

Application WB,E
Primary Accession P50225
Reactivity Human
Host Rabbit
Clonality polyclonal
Isotype Rabbit IgG

### **SULT1A1** Antibody (Center) - Additional Information

### **Gene ID 6817**

#### **Other Names**

Sulfotransferase 1A1, ST1A1, Aryl sulfotransferase 1, HAST1/HAST2, Phenol sulfotransferase 1, Phenol-sulfating phenol sulfotransferase 1, P-PST 1, ST1A3, Thermostable phenol sulfotransferase, Ts-PST, SULT1A1, STP, STP1

# **Target/Specificity**

This SULT1A1 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 90-123 amino acids of human SULT1A1.

#### **Dilution**

WB~~1:2000

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

## **Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

### **Precautions**

SULT1A1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

### **SULT1A1** Antibody (Center) - Protein Information

### Name SULT1A1

Synonyms STP, STP1

Function Sulfotransferase that utilizes 3'-phospho-5'-adenylyl sulfate (PAPS) as sulfonate donor to



catalyze the sulfate conjugation of a wide variety of acceptor molecules bearing a hydroxyl or an amine groupe. Sulfonation increases the water solubility of most compounds, and therefore their renal excretion, but it can also result in bioactivation to form active metabolites. Displays broad substrate specificity for small phenolic compounds. Plays an important role in the sulfonation of endogenous molecules such as steroid hormones and 3,3'-diiodothyronin (PubMed:10199779, PubMed:12471039, PubMed:16221673, PubMed:21723874, PubMed:22069470, PubMed:7834621). Mediates the sulfate conjugation of a variety of xenobiotics, including the drugs acetaminophen and minoxidil (By similarity). Mediates also the metabolic activation of carcinogenic N-hydroxyarylamines leading to highly reactive intermediates capable of forming DNA adducts, potentially resulting in mutagenesis (PubMed:7834621). 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.

### **Cellular Location**

Cytoplasm {ECO:0000250|UniProtKB:P17988}.

#### **Tissue Location**

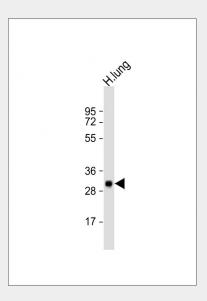
Liver, lung, adrenal, brain, platelets and skin.

### SULT1A1 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

### SULT1A1 Antibody (Center) - Images



Anti-SULT1A1 Antibody (Center)at 1:2000 dilution + human lung lysates Lysates/proteins at 20



μg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 34 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

### SULT1A1 Antibody (Center) - Background

Sulfotransferase that utilizes 3'-phospho-5'-adenylyl sulfate (PAPS) as sulfonate donor to catalyze the sulfate conjugation of catecholamines, phenolic drugs and neurotransmitters. Has also estrogen sulfotransferase activity. responsible for the sulfonation and activation of minoxidil. Is Mediates the metabolic activation of carcinogenic N- hydroxyarylamines to DNA binding products and could so participate as modulating factor of cancer risk.

## **SULT1A1 Antibody (Center) - References**

Zhu X.,et al.Biochem. Biophys. Res. Commun. 195:120-127(1993). Zhu X.,et al.Biochem. Biophys. Res. Commun. 192:671-676(1993). Wilborn T.W.,et al.Mol. Pharmacol. 43:70-77(1993). Yamazoe Y.,et al.Chem. Biol. Interact. 92:107-117(1994). Hwang S.-R.,et al.Biochem. Biophys. Res. Commun. 207:701-707(1995).