

SULT2A Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP2603b

Specification

SULT2A Antibody (C-term) - Product Information

WB,E
<u>Q06520</u>
<u>NP_003158</u>
Human
Rabbit
Polyclonal
Rabbit IgG
33780
253-285

SULT2A Antibody (C-term) - Additional Information

Gene ID 6822

Other Names

Bile salt sulfotransferase, Dehydroepiandrosterone sulfotransferase, DHEA-ST, Hydroxysteroid Sulfotransferase, HST, ST2, ST2A3, Sulfotransferase 2A1, ST2A1, SULT2A1, HST, STD

Target/Specificity

This SULT2A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 253-285 amino acids from the C-terminal region of human SULT2A.

Dilution WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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

SULT2A Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

SULT2A Antibody (C-term) - Protein Information

Name SULT2A1



Synonyms HST, STD

Function Sulfotransferase that utilizes 3'-phospho-5'-adenylyl sulfate (PAPS) as sulfonate donor to catalyze the sulfonation of steroids and bile acids in the liver and adrenal glands. Mediates the sulfation of a wide range of steroids and sterols, including pregnenolone, androsterone, DHEA, bile acids, cholesterol and as well many xenobiotics that contain alcohol and phenol functional groups (PubMed:<u>14573603</u>, PubMed:<u>18042734</u>, PubMed:<u>19589875</u>, PubMed:<u>21187059</u>, PubMed:<u>2268288</u>, PubMed:<u>29671343</u>, PubMed:<u>7678732</u>, PubMed:<u>7854148</u>). Sulfonation increases the water solubility of most compounds, and therefore their renal excretion, but it can also result in bioactivation to form active metabolites. Plays an important role in maintening steroid and lipid homeostasis (PubMed:<u>14573603</u>, PubMed:<u>19589875</u>, PubMed:<u>21187059</u>). Plays a key role in bile acid metabolism (PubMed:<u>2268288</u>). In addition, catalyzes the metabolic activation of potent carcinogenic polycyclic arylmethanols (By similarity).

Cellular Location Cytoplasm.

Tissue Location

Liver, adrenal and at lower level in the kidney. Is present in human fetus in higher level in the adrenal than the liver and the kidney

SULT2A Antibody (C-term) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- <u>Cell Culture</u>
- SULT2A Antibody (C-term) Images



Western blot analysis of lysate from human liver tissue lysate, using SULT2A Antibody (K268)(Cat.



#AP2603b). AP2603b was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.

SULT2A Antibody (C-term) - Background

One of the major roles of the sulfotransferases (ST) in the metabolism of drugs and endogenous compounds is the conversion of these substances into more hydrophilic water-soluble sulfate conjugates that can be easily excreted. Sulfation may also play a regulatory role for many endogenous compounds, such as steroids and neurotransmitters, by altering the biologic properties of these compounds. Otterness et al. (1992), Kong et al. (1992), and Comer et al. (1993) reported the cloning of cDNAs encoding liver dehydroepiandrosterone (DHEA) sulfotransferase. The predicted protein has 285 amino acids. Although Northern blot analysis of human liver RNA detected transcripts of 3 different sizes, Southern blot analysis of human DNA suggested that only 1 gene is present in the genome. This gene has an important role in the sulfation of both bile acids and steroids in the liver and adrenals. The human adrenal form of this enzyme is physically, immunologically, and kinetically similar, perhaps identical, to the liver form. Dehydroepiandrosterone sulfate is quantitatively one of the major steroids secreted from the adrenal cortex.

SULT2A Antibody (C-term) - References

Otterness, D. M., et al. Molec. Pharm. 41: 865-872 (1992). Kong, A.-N. T., et al. Biochem. Biophys. Res. Commun. 187: 448-454 (1992). Comer, K. A., et al. Biochem. J. 289: 233-240 (1993).