

# SULT2B1

Purified Mouse Monoclonal Antibody (Mab) Catalog # AM8716b

## **Product Information**

Application	WB, E
Primary Accession	<u>000204</u>
Reactivity	Human
Predicted	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,к
Clone Names	2142CT1553.26.63
Calculated MW	41308

## **Additional Information**

Gene ID	6820
Other Names	Sulfotransferase family cytosolic 2B member 1, ST2B1, Sulfotransferase 2B1, 2.8.2.2, Alcohol sulfotransferase, Hydroxysteroid sulfotransferase 2, SULT2B1, HSST2
Target/Specificity	This antibody is generated from a mouse immunized with a reconbinant protein from human.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, 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	SULT2B1 is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Protein Information**

Name	SULT2B1
Synonyms	HSST2
Function	Sulfotransferase that utilizes 3'-phospho-5'-adenylyl sulfate (PAPS) as sulfonate donor to catalyze the sulfate conjugation. Responsible for the

	sulfation of cholesterol (PubMed: <u>12145317</u> , PubMed: <u>19589875</u> ). Catalyzes sulfation of the 3beta-hydroxyl groups of steroids, such as, pregnenolone and dehydroepiandrosterone (DHEA) (PubMed: <u>12145317</u> , PubMed: <u>16855051</u> , PubMed: <u>21855633</u> , PubMed: <u>9799594</u> ). Preferentially sulfonates cholesterol, while it also has significant activity with pregnenolone and DHEA (PubMed: <u>12145317</u> , PubMed: <u>21855633</u> ). Plays a role in epidermal cholesterol metabolism and in the regulation of epidermal proliferation and differentiation (PubMed: <u>28575648</u> ).
Cellular Location	Cytoplasm, cytosol. Microsome. Nucleus. Note=Phosphorylation of Ser-348 is required for translocation to the nucleus
Tissue Location	Expressed in the stratum granulosum-stratum corneum junction in the skin (at protein level) (PubMed:28575648). Expressed highly in placenta, prostate and trachea and lower expression in the small intestine and lung (PubMed:9799594)

### Background

Sulfotransferase that utilizes 3'-phospho-5'-adenylyl sulfate (PAPS) as sulfonate donor to catalyze the sulfate conjugation of many hormones, neurotransmitters, drugs and xenobiotic compounds. Sulfonation increases the water solubility of most compounds, and therefore their renal excretion, but it can also result in bioactivation to form active metabolites. Sulfates hydroxysteroids like DHEA. Isoform 1 preferentially sulfonates cholesterol, and isoform 2 avidly sulfonates pregnenolone but not cholesterol. Plays a role in epidermal cholesterol metabolism and in the regulation of epidermal proliferation and differentiation (PubMed:<u>28575648</u>).

## References

Her C.,et al.Genomics 53:284-295(1998). Grimwood J.,et al.Nature 428:529-535(2004). Fuda H.,et al.J. Biol. Chem. 277:36161-36166(2002). He D.,et al.Drug Metab. Dispos. 34:1749-1755(2006). Salman E.D.,et al.J. Steroid Biochem. Mol. Biol. 127:315-323(2011).

#### Images



Anti-SULT2B1 at 1:8000 dilution + MCF-7 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 41 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

All lanes : Anti-SULT2B1 at 1:2000 dilution Lane 1: MCF-7 whole cell lysate Lane 2: MDA-MB-468 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 41 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



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