

DESCRIPTION

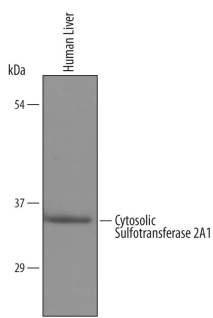
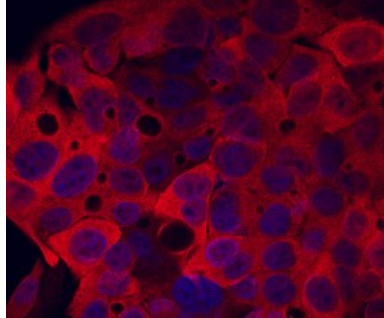
Species Reactivity	Human
Specificity	Detects human Cytosolic Sulfotransferase 2A1/SULT2A1 in direct ELISAs and Western blots. In direct ELISAs, less than 2% cross-reactivity with recombinant human (rh) SULT1A1, rhSULT1A3, rhSULT1B1, rhSULT1E1, and rhSULT4A1 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Cytosolic Sulfotransferase 2A1/SULT2A1 Ser2-Glu285 Accession # Q06520
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	0.5 µg/mL	See Below
Immunocytochemistry	5-15 µg/mL	See Below
Neutralization	Measured by its ability to neutralize Recombinant Human Cytosolic Sulfotransferase 2A1/SULT2A1 (8.33 µg/mL, Catalog # 5828-ST) transfer from the sulfate donor Adenosine 3'-phosphate 5'-phosphosulfate (PAPS, 33 µM) to Trans-Dehydroandrosterone (DHEA, 133 µM). The Neutralization Dose (ND ₅₀) is typically 35.9 µg/mL.	

DATA

<p>Western Blot</p>  <p>Detection of Human Cytosolic Sulfotransferase 2A1/SULT2A1 by Western Blot. Western blot shows lysates of human liver tissue. PVDF Membrane was probed with 0.5 µg/mL of Human Cytosolic Sulfotransferase 2A1/SULT2A1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5828) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Cytosolic Sulfotransferase 2A1/SULT2A1 at approximately 35 kDa (as indicated). This experiment was conducted under reducing conditions and using <i>Immunoblot Buffer Group 8</i>.</p>	<p>Immunocytochemistry</p>  <p>Cytosolic Sulfotransferase 2A1/SULT2A1 in HepG2 Human Cell Line. Cytosolic Sulfotransferase 2A1/SULT2A1 was detected in immersion fixed HepG2 human hepatocellular carcinoma cell line using Sheep Anti-Human Cytosolic Sulfotransferase 2A1/SULT2A1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5828) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Sheep IgG Secondary Antibody (red; Catalog # NL010) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for <i>Fluorescent ICC Staining of Cells on Coverslips</i>.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Sulfotransferase 2A1 (SULT2A1), also called DHEA-ST (DHEA/bile acid sulfotransferase), is a 35 kDa member of the cytosolic sulfotransferase family, which are Phase II drug-metabolizing enzymes that catalyze the sulfation of many endogenous and xenobiotic substrates. SULT2A1 is primarily expressed in liver and adrenal tissues. It sulfates steroids and bile acids, playing roles in maintaining cholesterol and bile acid homeostasis by increasing cholesterol catabolism and preventing toxicity from bile acid accumulation. Human SULT2A1 shares 63-65% amino acid identity with mouse and rat SULT2A1.