

DESCRIPTION

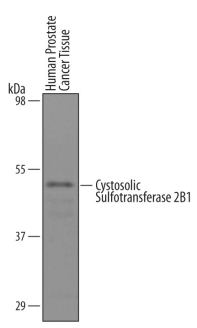
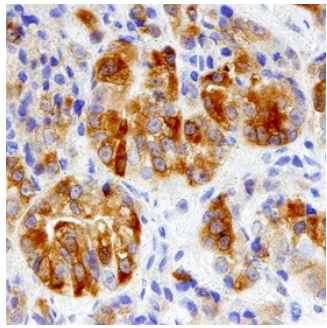
Species Reactivity	Human
Specificity	Detects human SULT2B1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 1% cross-reactivity with recombinant human (rh) SULT1B1, rhSULT1A1, rhSULT2A1, rhSULT4A1, and rhSULT1E1 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Cytosolic Sulfotransferase 2B1/SULT2B1 isoform 1 Asp2-Ser365 Accession # O00204
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 either lyophilized or 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	1 µg/mL	See Below
Immunohistochemistry	5-15 µg/mL	See Below
Immunoprecipitation	25 µg/mL	Cell lysates spiked with Recombinant Human Cytosolic Sulfotransferase 2B1/SULT2B1, see our available Western blot detection antibodies

DATA

<p>Western Blot</p>  <p>Detection of Human Cytosolic Sulfotransferase 2B1/SULT2B1 by Western Blot. Western blot shows lysates of human prostate cancer tissue. PVDF Membrane was probed with 1 µg/mL of Human Cytosolic Sulfotransferase 2B1/SULT2B1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6174) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Cytosolic Sulfotransferase 2B1/SULT2B1 at approximately 48 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.</p>	<p>Immunohistochemistry</p>  <p>Cytosolic Sulfotransferase 2B1/SULT2B1 in Human Prostate Cancer Tissue. Cytosolic Sulfotransferase 2B1/SULT2B1 was detected in immersion fixed paraffin-embedded sections of human prostate cancer tissue using Human Cytosolic Sulfotransferase 2B1/SULT2B1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6174) at 3 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to the cytoplasm of glandular epithelial and stromal cells. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</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

SULT2B1 (Sulfotransferase 2B1; also ST2B1b and alcohol sulfotransferase) is a 45-48 kDa member of the sulfotransferase 1 family of enzymes. SULT2B1 is widely expressed, being found in platelets, stratum granulosum keratinocytes, breast and prostatic epithelium, and syncytiotrophoblast cells. SULT2B1 catalyzes the sulfonation of DHEA, a precursor for sex steroids, and cholesterol, which supports stratification of the epidermis. Human SULT2B1 is 365 amino acids (aa) in length. There are PAPS binding sites between aa 70-75 and 147-155, a myristoylation motif between aa 255-259, and a Pro-rich region between aa 305-364 that may extend enzyme half-life. There is one 43 kDa splice form (ST2B1a) that shows an eight aa substitution for aa 1-23. It is expressed in fetal brain and generates pregnenolone sulfate, a steroid that modulates neurotransmitters. Full-length human SULT2B1b shares only 71% aa identity with mouse SULT2B1.