

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Cytosolic Sulfotransferase 2B1/SULT2B1 in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human (rh) SULT1A1, 1A3, 1B1, 1C4, 1E1, 2A1, or 4A1 is observed.
Source	Monoclonal Mouse IgG _{2A} Clone # 682516
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Cytosolic Sulfotransferase 2B1/SULT2B1 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 as a 0.2 µm filtered solution in PBS.

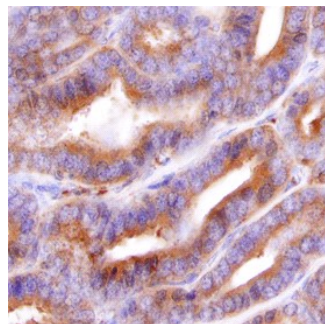
APPLICATIONS

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
Immunohistochemistry	8-25 µg/mL	See Below

DATA

Immunohistochemistry



Cytosolic Sulfotransferase 2B1/SULT2B1 in Human Prostate. Cytosolic Sulfotransferase 2B1/SULT2B1 was detected in immersion fixed paraffin-embedded sections of human prostate using Mouse Anti-Human Cytosolic Sulfotransferase 2B1/SULT2B1 Monoclonal Antibody (Catalog # MAB6174) at 15 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-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to epithelial cells. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
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 ST2B1 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 SULT2B1 shares 71% aa identity with mouse SULT2B1.