

DESCRIPTION

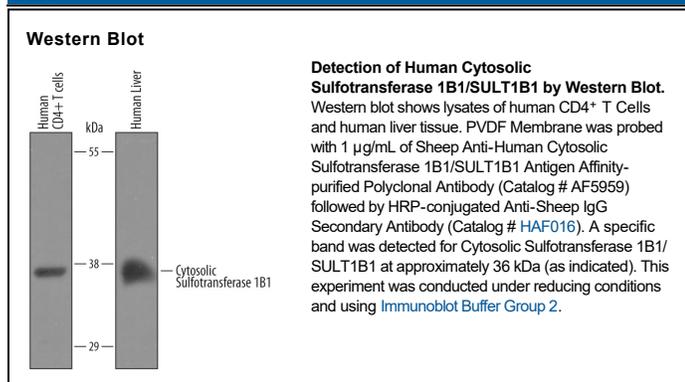
Species Reactivity	Human
Specificity	Detects human Cytosolic Sulfotransferase 1B1/SULT1B1 in direct ELISAs and Western blots. In direct ELISAs, approximately 5% cross-reactivity with recombinant human (rh) SULT1A1 and rhSULT1A3 is observed and less than 2% cross-reactivity with rhSULT2A1, rhSULT4A1, rhSULT2B1, and rhSULT1E1 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Cytosolic Sulfotransferase 1B1/SULT1B1 Leu2-Ile296 Accession # O43704
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
Neutralization	Measured by its ability to neutralize Recombinant Human Cytosolic Sulfotransferase 1B1/SULT1B1 (8.33 µg/mL, Catalog # 5959-ST) transfer from the sulfate donor Adenosine 3'-phosphate 5'-phosphosulfate (PAPS, 33 µM) to 1-Naphthol (333 µM). The Neutralization Dose (ND ₅₀) is typically 110 µg/mL.	

DATA



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

Cytosolic Sulfotransferases are a family of phase II drug-metabolizing enzymes that catalyze the sulfation of many endogenous and xenobiotic substrates (1-3). They have important functions in the metabolism of many endogenous compounds including steroids, bile acids, thyroid hormones and monoamine neurotransmitters. They are distributed throughout the body and serve to inactivate and increase water-solubility of xenobiotics and therapeutic drugs. Cytosolic sulfotransferases are distinct from Golgi resident sulfotransferases by lacking N-terminal signal-anchorage domains and residing only in the cytoplasm. SULT1B1 is primarily expressed in the liver, peripheral blood leukocytes, colon, spleen and small intestine and can sulfate thyroid hormones and small phenols (4). Human SULT1B1 shows 72.3% amino acid sequence identity to mouse SULT1B1.

References:

1. Falany, C. N. (1997) FASEB J. **11**:206.
2. Gamage, N. U. *et al.* (2006) Toxicol. Sci. **90**:5.
3. Allali-Hassani, A. *et al.* (2007) PLoS Biol. **5**:e97.
4. Wang, J. *et al.* (1998) Mol. Pharmacol. **53**:274.