

DESCRIPTION

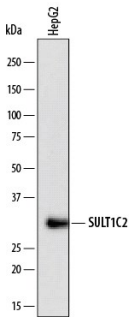
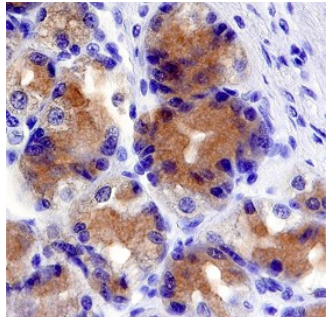
Species Reactivity	Human
Specificity	Detects human Cytosolic Sulfotransferase 1C2/SULT1C2 in ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 844529
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Cytosolic Sulfotransferase 1C2/SULT1C2 Ala2-Leu296 Accession # O00338
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	2 µg/mL	See Below
Immunohistochemistry	8-25 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human Cytosolic Sulfotransferase 1C2/SULT1C2 by Western Blot. Western blot shows lysates of HepG2 human hepatocellular carcinoma cell line. PVDF membrane was probed with 2 µg/mL of Mouse Anti-Human Cytosolic Sulfotransferase 1C2/SULT1C2 Monoclonal Antibody (Catalog # MAB7458) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for Cytosolic Sulfotransferase 1C2/SULT1C2 at approximately 35 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunohistochemistry</p>  <p>Cytosolic Sulfotransferase 1C2/SULT1C2 in Human Stomach. Cytosolic Sulfotransferase 1C2/SULT1C2 was detected in immersion fixed paraffin-embedded sections of human stomach using Mouse Anti-Human Cytosolic Sulfotransferase 1C2/SULT1C2 Monoclonal Antibody (Catalog # MAB7458) 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 counter-stained with hematoxylin (blue). Specific staining was localized to cytoplasm of cells in gastric glands. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.</p>
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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

Cytosolic sulfotransferases catalyze the sulfonation of many hormones, neurotransmitters, drugs, and xenobiotic compounds. They are distinct from Golgi-resident sulfotransferases by the absence of transmembrane domains and are located in the cytoplasm (1, 2). SULT1C2 is mainly expressed in the gastrointestinal tract (stomach, duodenum, jejunum, ileum, colon, caecum and rectum), liver and kidneys, but not in the lungs (3). In contrast, SULT1C4, a sulfotransferase that is most closely related to SULT1C2 (4), is expressed at higher levels in fetal lung and kidney and at lower levels in fetal heart. So far, SULT1C2 is found to be active only on *p*-nitrophenol (3).

References:

1. Falany, C. N. (1997) *FASEB J.* **11**:206.
2. Gamage, N. U. *et al.* (2006) *Toxicol. Sci.* **90**:5.
3. Hehonah, N. *et al.* (1999) *Int J. Biochem. Cell. Biol.* **31**:869.
4. Sakakibara, Y. *et al.* (1998) *J. Biol. Chem.* **273**:33929.