

## DESCRIPTION

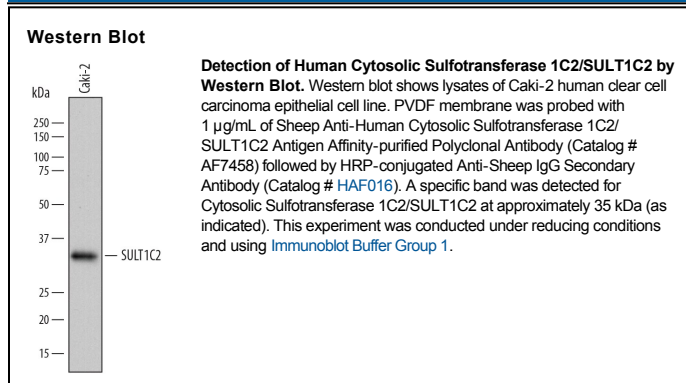
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Cytosolic Sulfotransferase 1C2/SULT1C2 in direct ELISAs and Western blots. In direct ELISAs, less than 1% cross-reactivity with recombinant human SULT1C4 is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human Cytosolic Sulfotransferase 1C2/SULT1C2 Ala2-Leu296, predicted Accession # O00338
<b>Formulation</b>	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
<b>Western Blot</b>	1 µg/mL	See Below

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.2 mg/mL.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>● 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>● 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>● 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## 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). The enzymatic activity of our recombinant human SULT1C2 was determined using a phosphatase-coupled assay (5).

### 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.
5. Prather, B. *et al.* (2012) *Anal. Biochem.* **423**:86.