

DESCRIPTION

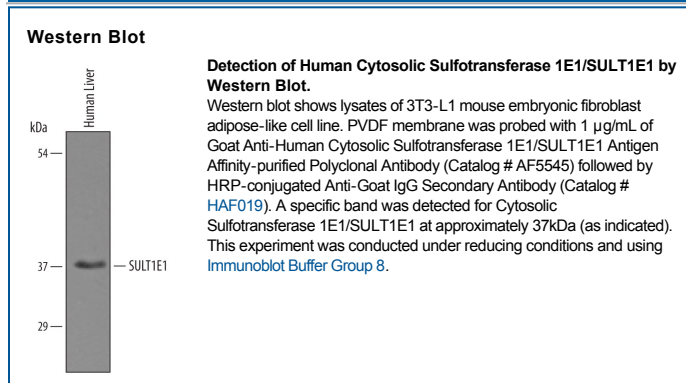
Species Reactivity	Human
Specificity	Detects human Sulfotransferase 1E1/SULT1E1 in direct ELISAs and Western blots. In direct ELISAs, approximately 10% cross-reactivity with recombinant human (rh) Sulfotransferase 1A1 is observed and less than 2% cross-reactivity with rhSulfotransferase 2A1 and rhSulfotransferase 4A1 is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human Sulfotransferase 1E1/SULT1E1 Asn2-Ile294 Accession # P49888
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	1 µg/mL	See Below
Immunoprecipitation	25 µg/mL	Cell lysates spiked with Recombinant Human Cytosolic Sulfotransferase 1E1/SULT1E1 (Catalog # 5545-ST), see our available Western blot detection antibodies

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 catalyze the sulfation 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. SULT1E1 is widely known as an estrogen sulfotransferase and may control estrogen levels by converting free estradiol to its inactive sulfate conjugate (1). Known substrates of this enzyme also include dehydroepiandrosterone, pregnenolone, ethinylestradiol, equalenin, diethylstilbesterol, 4-nitrophenol, 1-naphthol and resveratrol (2, 3). SULT1E1 activity is found in reproductive organs (4), intestine and liver (3, 5).

References:

1. Gong, H. *et al.* (2008) *Cancer Res.* **68**:7386.
2. Falany, C.N. *et al.* (1995) *J. Steroid Biochem. Mol. Biol.* **52**:529.
3. Miksits, M. *et al.* 2005, *Xenobiotica* **35**:1101.
4. Takase, Y. *et al.* (2007) *The Prostate* **67**:405.
5. Schrag, M.L. *et al.* (2004) *Drug Metabolism and Disposition* **32**:1299.
6. Robbins, P.W. (1962) *Methods in Enzymology*, Vol. V, Academic Press, Inc., New York, 964.
7. MacRae, I.J., I.H. Segel, and A.J. Fisher. (2000) *Biochemistry*. **39**: 1613.
8. Wu, Z.L., *et al.* (2002) *Faseb J.* **16**:539.