



# Recombinant Protein Technical Manual

## Recombinant Human SULT2A1 Protein (His Tag)

RPES1404

### Product Data:

**Product SKU:** RPES1404

**Size:** 20µg

**Species:** Human

**Expression host:** E. coli

**Uniprot:** NP\_003158.2

### Protein Information:

#### Molecular Mass:

**AP Molecular Mass:** 35 kDa

**Tag:** N-His

#### Bio-activity:

**Purity:** > 97 % as determined by reducing SDS-PAGE.

**Endotoxin:** Please contact us for more information.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile 50mM Tris, 500mM NaCl, 20% glycerol, pH 8.0

**Reconstitution:** Please refer to the printed manual for detailed information.

#### Application:

**Synonyms:** Bile Salt Sulfotransferase; Dehydroepiandrosterone Sulfotransferase; DHEA-ST; Hydroxysteroid Sulfotransferase; HST; ST2; ST2A3; Sulfotransferase 2A1; ST2A1; SULT2A1; HST; STD;DHEA-ST;DHEAS;ST2A3

## Immunogen Information:

**Sequence:** Ser 2-Glu 285

## Background:

Hydroxysteroid sulfotransferase ( SULT2A1 ) is a key enzyme in the testicular and hepatic metabolism of 5 $\alpha$ -androstene-3-one, which is a major component of the off-odor and off-flavor in pork known as boar taint. Sulfotransferase enzymes catalyze the sulfate conjugation of many hormones, neurotransmitters, drugs, and xenobiotic compounds. These cytosolic enzymes are different in their tissue distributions and substrate specificities. The gene structure (number and length of exons) is similar among family members. SULT2A1 is a sulfo-conjugating phase II enzyme expressed at very high levels in the liver and intestine, the two major first-pass metabolic tissues, and in the steroidogenic adrenal tissue. SULT2A1 acts preferentially on the hydroxysteroids dehydroepiandrosterone, testosterone/dihydrotestosterone, and pregnenolone and on cholesterol-derived amphipathic sterol bile acids.