

Recombinant Human SULT1A3 Protein (His Tag)

Catalog No. PKSH031128

Note: Centrifuge before opening to ensure complete recovery of vial contents.

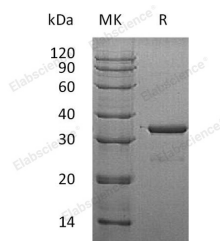
Description

Synonyms	Sulfotransferase 1A3/1A4;ST1A3/ST1A4;Aryl Sulfotransferase 1A3/1A4;Catecholamine-Sulfating Phenol Sulfotransferase;HAST3;M-PST;Monoamine-Sulfating Phenol Sulfotransferase;Placental Estrogen Sulfotransferase;Sulfotransferase Monoamine-Preferring;Thermolabile Phenol Sulfotransferase;TL-PST;SULT1A3;STM;SULT1A4;HAST;HAST3;M-PST;ST1A5;STM
Species	Human
Expression Host	E.coli
Sequence	Glu2-Leu295
Accession	NP_808220.1
Calculated Molecular Weight	30.5 kDa
Observed molecular weight	34 kDa
Tag	N-His
Bioactivity	Measured by its ability to transfer sulfate from PAPS to 1-Naphthol. The specific activity is > 150 pmoles/min/μg.

Properties

Purity	> 94 % as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
Storage	Generally, 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 20mM Tris, 500mM NaCl, pH 7.4 Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



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Background

SULT1A3 belongs to the sulfotransferase 1 family. Sulfotransferase enzymes catalyze the sulfate conjugation of many hormones, neurotransmitters, drugs, and xenobiotic compounds. They are different in their tissue distributions and substrate specificities while their gene structure (number and length of exons) is similar. SULT1A3 gene encodes a phenol sulfotransferase with thermolabile enzyme activity. Four sulfotransferase genes are located on the p arm of chromosome 16; this gene and SULT1A4 arose from a segmental duplication. It is the most centromeric of the four sulfotransferase genes. Exons of this gene overlap with exons of a gene that encodes a protein containing GIY-YIG domains (GIYD1). SULT1A3 is expressed in liver, colon, kidney, lung, brain, spleen, small intestine, placenta and leukocyte. SULT1A3 is a sulfotransferase that utilizes 3'-phospho-5'-adenylyl sulfate (PAPS) as sulfonate donor to catalyze the sulfate conjugation of phenolic monoamines (neurotransmitters such as dopamine, norepinephrine and serotonin) and phenolic and catechol drugs.

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