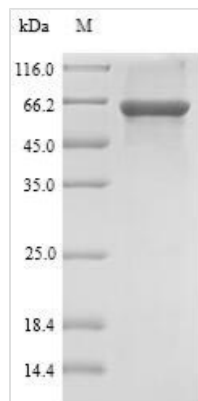




Recombinant Rat Sulfotransferase family cytosolic 1B member 1 (Sult1b1)

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|--------------------------|---|
| Product Code | CSB-EP022937RA |
| Relevance | Sulfotransferase that utilizes 3'-phospho-5'-adenylyl sulfate (PAPS) as sulfonate donor to catalyze the sulfate conjugation of many hormones, neurotransmitters, drugs and xenobiotic compounds. Sulfonation increases the water solubility of most compounds, and therefore their renal excretion, but it can also result in bioactivation to form active metabolites. sulfonation of DOPA, tyrosine isomers and thyroid hormones such as 3,3',5-triiodothyronine and 3,3'-diiodothyronine. May play a role in the limitation of the production of L-DOPA and L-m-tyrosine and also in facilitating their excretion. |
| Abbreviation | Recombinant Rat Sult1b1 protein |
| Storage | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C. |
| Uniprot No. | P52847 |
| Product Type | Recombinant Protein |
| Immunogen Species | Rattus norvegicus (Rat) |
| Purity | Greater than 85% as determined by SDS-PAGE. |
| Sequence | MGTAEDVFRKDLKIIHGYPMVYAFALGWEEKIEEFQSRPCDIVIPTYPKSGTTWL SEIVDMVLNDGNVEKCKRDVITSKVPMLEQNVPGARRSGVELLKKTSPRIIKT HLPIDLLPKSFWDNKCKMIYLARNGKDVAVSYYHFDLMNNIQPLPGTWEEYLE KFLAGNVAYGSWFDHVKSWWEKREGHPILFLYYEDLKKNPKKEIKKIANFLDK TLDEHTLERIVHHTSFEVMKDNPLVNYTHLPTEIMDHSKSPFMRKGVVGDWKN YFTMTQSEKFDIYKKKLSGTTLEFCTDIQSA |
| Research Area | Signal Transduction |
| Source | E.coli |
| Target Names | Sult1b1 |
| Protein Names | DOPA/tyrosine sulfotransferase |
| Expression Region | 1-299aa |
| Notes | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week. |
| Tag Info | N-terminal 10xHis-SUMO-tagged and C-terminal Myc-tagged |
| Mol. Weight | 54.8 kDa |
| Protein Length | Full Length |
| Image | |



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The region for expressing recombinant Rat Sult1b1 contains amino acids 1-299. The calculated molecular weight for this Sult1b1 protein is 54.8 kDa. This Sult1b1 recombinant protein is manufactured in e.coli. The Sult1b1 coding gene included the N-terminal 10xHis-SUMO tag and C-terminal Myc tag, which simplifies the detection and purification processes of the recombinant Sult1b1 protein in following stages of expression and purification.

Sulfotransferase family cytosolic 1B member 1 (Sult1b1) is an enzyme belonging to the sulfotransferase family, playing a crucial role in the phase II detoxification pathway. Sult1b1 is responsible for catalyzing the transfer of a sulfate group from 3'-phosphoadenosine-5'-phosphosulfate (PAPS) to a variety of substrates, including hormones, drugs, and xenobiotics. This sulfonation process enhances the water solubility of these compounds, facilitating their excretion from the body. In rats, Sult1b1 is expressed in various tissues, with prominent activity in the liver. Understanding the function of Sult1b1 is essential for elucidating detoxification mechanisms, drug metabolism, and the regulation of endogenous substances in rodents. Research on Sult1b1 contributes to advancements in drug development, toxicology, and the overall comprehension of metabolic pathways in rats.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.