

Product datasheet for RC210772

CSPS (SULT1A3) (NM_003166) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Tag: | Myc-DDK |
| Symbol: | CSPS |
| Synonyms: | HAST; HAST3; M-PST; MGC117469; ST1A5; STM; SULT1A4; TL-PST |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| ORF Nucleotide Sequence: | >RC210772 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGAGCTGATCCAGGACACCTCCCGCCGCCACTGGAGTACGTGAAGGGGTCCCGCTCATCAAGTACT
 TTGCAGAGGCACTGGGGCCCTGCAGAGCTTCCAAGCCGACCTGATGACCTGCTCATCAACACCTACCC
 CAAGTCTGGCACCACCTGGGTGAGCCAGATACTGGACATGATCTACCAGGGCGGCGACCTAGAGAAGTGT
 AACC GGCTCCCATCTACGTACGGGTGCCCTTCCTTGAGGTCAATGATCCAGGGGAACCCCTCAGGGCTGG
 AGACTCTGAAAGACACACCGCCCCACGGCTCATCAAGTCACACCTGCCCTGGCTCTGCTCCCTCAGAC
 TCTGTTGGATCAGAAGGTCAAGGTGGTCTATGTTGCCCGAAACCCAAAGGACGTGGCGGTCTCCTACTAC
 CATTTCCACCGTATGGAAAAGGCGACCCCTGAGCCTGGGACCTGGGACAGCTTCTGAAAAGTTTCATGG
 CTGGAGAAGTGTCTACTGGTCTGGTACCAGCACGTGCAGGAGTGGTGGGAGCTGAGCCGACCCACCC
 TGTCTCTACCTCTTCTATGAAGACATGAAGGAGAACCCAAAAGGGAGATTCAAAGATCCTGGAGTTT
 GTGGGGCGCTCCCTGCCAGAGGAGACCATGGACTTCATGGTTCAGCACACGTGTTCAAGGAGATGAAGA
 AGAACCTATGACCAACTACACCACCGTCCCCAGGAGCTCATGGACCACAGCATCTCCCTTCATGAG
 GAAAGGCATGGCTGGGGACTGGAAGACCACCTTACCCTGGCGCAGAATGAGCGCTTCGATGCGGACTAT
 GCGGAGAAGATGGCAGGCTGCAGCCTCAGCTTCCGCTCTGAGCTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA


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Protein Sequence: >RC210772 protein sequence
 Red=Cloning site Green=Tags(s)

MELIQDTSRPPLEYVKGVPLIKYFAEALGPLQSFQARPDDLINTYPKSGTTWVSQILDMIYQGGDLEKC
 NRAPIYVRVPFLEVNDPGEPSGLETCLKDTPPRLIKSHLPLALLPQTLLDQKVKKVYVARNPKDVAVSYY
 HFHRMEKAHPEPGTWDSFLEKFMAGEVSYWSYQHVQEWELSRTHPVL YLFYEDMKENPKREIQKILEF
 VGRSLPEETDMFMVQHTSFKEMKKNPMTNYTTVPQELMDHSISPFRKGMAGDWKTFTTVAQNERFDADY
 AEKMAGCSLSFRSEL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6377_h10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_003166

ORF Size: 885 bp

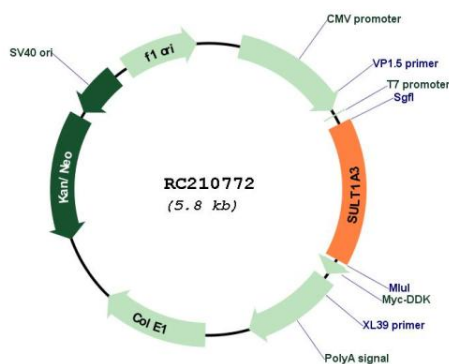
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

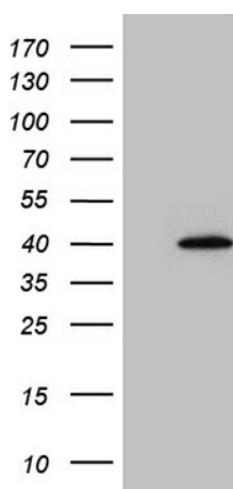
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

| | |
|-------------------------------|---|
| Reconstitution Method: | <ol style="list-style-type: none"> 1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C. |
| Note: | Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required. |
| RefSeq: | <u>NM_003166.3, NP_003157.1</u> |
| RefSeq Size: | 1604 bp |
| RefSeq ORF: | 887 bp |
| Locus ID: | 6818 |
| Cytogenetics: | 16p11.2 |
| Domains: | Sulfotransfer |
| Protein Pathways: | Sulfur metabolism |
| MW: | 34.3 kDa |
| Gene Summary: | <p>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. This 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. This gene is the most centromeric of the four sulfotransferase genes. Read-through transcription exists between this gene and the upstream SLX1A (SLX1 structure-specific endonuclease subunit homolog A) gene that encodes a protein containing GIY-YIG domains. [provided by RefSeq, Nov 2010]</p> |

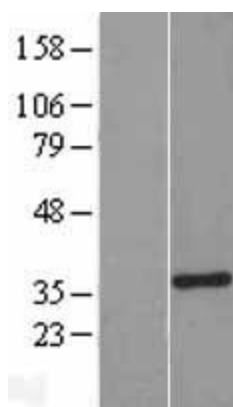
Product images:



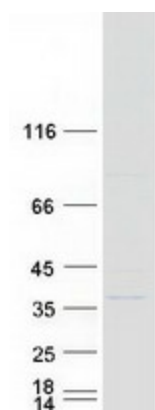
Circular map for RC210772



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY SULT1A3 (Cat# RC210772, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-SULT1A3 (Cat# [TA811127])(1:2000). Positive lysates [LY418855] (100ug) and [LC418855] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY422768]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC219331] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SULT1A3 protein (Cat# [TP310772]). The protein was produced from HEK293T cells transfected with SULT1A3 cDNA clone (Cat# RC210772) using MegaTran 2.0 (Cat# [TT210002]).