

Product datasheet for RC201601

SULT1A1 (NM_001055) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	SULT1A1
Synonyms:	HAST1/HAST2; P-PST; P-PST 1; PST; ST1A1; ST1A3; STP; STP1; ts-PST; TSPST1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC201601 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGAGCTGATCCAGGACACCTCCCGCCGCGGCTGGAGTACGTGAAGGGGGTCCCGCTCATCAAGTACT
 TTGCAGAGGCACTGGGGCCCTGCAGAGCTTCAGGCGCGGCTGATGACCTGCTCATCAGCACCTACCC
 CAAGTCCGGCACTACCTGGGTAAGCCAGATTCTGGACATGATCTACCAGGGTGGTACCTGGAGAAGTGT
 CACCGAGCTCCCATCTTCATGCGGGTGCCTTCCTTGAGTTCAAAGCCCCAGGGATTCCCTCAGGGATGG
 AGACTCTGAAAGACACACCGGCCCCAGCACTCCTGAAGACACACCTGCCCTGGCTCTGCTCCCCAGAC
 TCTGTTGGATCAGAAGGTCAAGGTGGTCTATGTTGCCCGCAACGCAAAGGATGTGGCAGTTTCTCTACTAC
 CACTTCTACCACATGGCCAAGGTGCACCTGAGCCTGGGACCTGGGACAGCTTCTGGAGAAGTTCATGG
 TCGGAGAAGTGTCTACGGATCCTGGTACCAGCACGTGCAGGAGTGGTGGGAGCTGAGCCGACCCACCC
 TGTTCCTACCTCTTCTATGAAGACATGAAGGAGAACCCGAAAGGGAGATTCAAAGATCCTGGAGTTT
 GTGGGGCACTCCCTGCCAGAGGAGACCGTGGACTTCGTGGTTCAGCACACGTGTTCAAGGAGATGAAGA
 AGAACCCTATGACCAACTACACCACCGTCCCCAGGAGTTCATGGACCACAGCATCTCCCTTCATGAG
 GAAAGGCATGGCTGGGGACTGGAAGACCACCTTACCCTGGCGCAGAATGAGCGCTTCGATGCGGACTAT
 GCGGAGAAGATGGCAGGCTGCAGCCTCAGCTTCCGCTCTGAGCTG

ACGCGTACGCGGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA


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Protein Sequence: >RC201601 protein sequence
 Red=Cloning site Green=Tags(s)

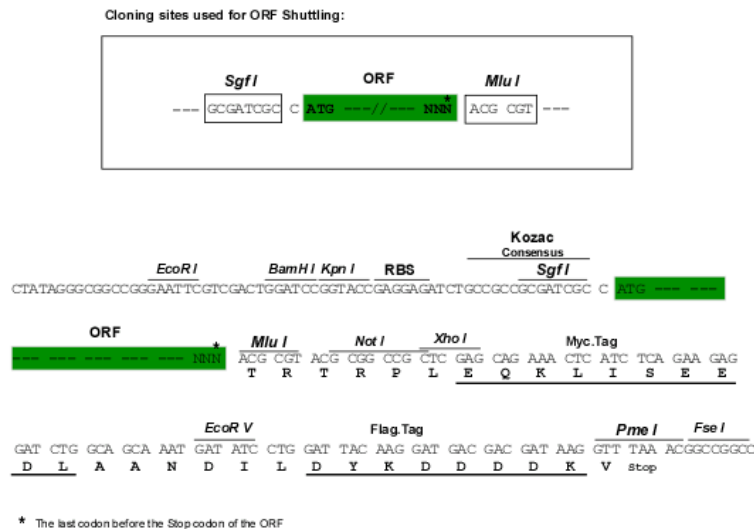
MELIQDTSRPPLEYVKGVPLIKYFAEALGPLQSFQARPDDL ISTYPKSGTTWVSQILDMIYQGGDLEKC
 HRAPIFMRVPFLEFKAPGIPSGMETLKDTPAPRLKTHLPLALLPQTLLDQKVKKVYVARNADVAVSYY
 HFYHMAKVHPEPGTWDSFLEKFMVGEVSYGSWYQHVQEWELSRTHPVL YLFYEDMKENPKREIQKILEF
 VGHSLPEETVDFVVQHTSFKEMKKNPMTNYTTVPQEFMDHSISPFRKGMAGDWKTFTTVAQNERFDADY
 AEKMAGCSLSFRSEL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6299_f03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001055

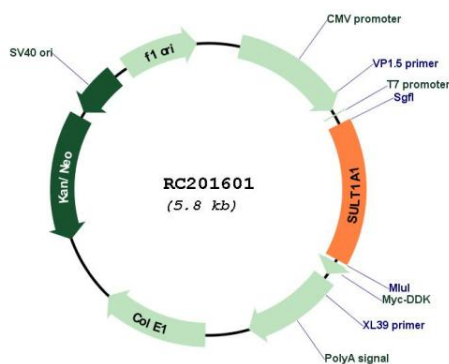
ORF Size: 885 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

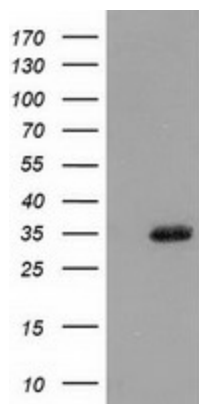
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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_001055.3</u>
RefSeq Size:	1254 bp
RefSeq ORF:	888 bp
Locus ID:	6817
UniProt ID:	<u>P50225</u>
Cytogenetics:	16p11.2
Domains:	Sulfotransfer
Protein Pathways:	Sulfur metabolism
MW:	34.1 kDa
Gene Summary:	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 one of two phenol sulfotransferases with thermostable enzyme activity. Multiple alternatively spliced variants that encode two isoforms have been identified for this gene. [provided by RefSeq, Jul 2008]

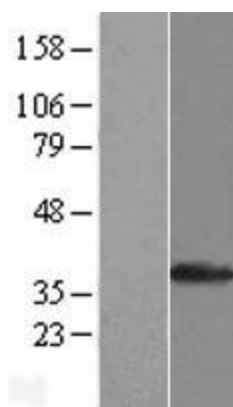
Product images:



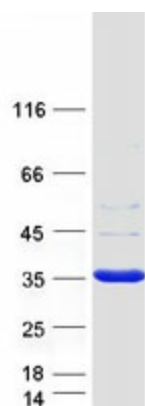
Circular map for RC201601



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY SULT1A1 (Cat# RC201601, 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-SULT1A1 (Cat# [TA501951]). Positive lysates [LY420735] (100ug) and [LC420735] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY406103]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC212198] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified SULT1A1 protein (Cat# [TP301601]). The protein was produced from HEK293T cells transfected with SULT1A1 cDNA clone (Cat# RC201601) using MegaTran 2.0 (Cat# [TT210002]).