

Product datasheet for RC204897

OriGene Technologies, Inc.

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SULT1A4 (NM 001017391) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: SULT1A4 (NM_001017391) Human Tagged ORF Clone

Tag: Myc-DDK SULT1A4 Symbol:

Synonyms: aryl sulfotransferase; phenol sulfotransferase; sulfokinase; sulfotransferase family, cytosolic,

1A, phenol-preferring, member 4

Mammalian Cell

Selection:

Neomycin

Vector: pCMV6-Entry (PS100001) E. coli Selection: Kanamycin (25 ug/mL) >RC204897 ORF sequence

ORF Nucleotide

Red=Cloning site Blue=ORF Green=Tags(s) Sequence:

> TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC GCCGCGATCGCC

> ATGGAGCTGATCCAGGACACCTCCCGCCCGCCACTGGAGTACGTGAAGGGGGTCCCGCTCATCAAGTACT TTGCAGAGGCACTGGGGCCCCTGCAGAGCTTCCAAGCCCGACCTGATGACCTGCTCATCAACACCTACCC CAAGTCTGGCACCACCTGGGTGAGCCAGATACTGGACATGATCTACCAGGGCGGCGACCTAGAGAAGTGT AACCGGGCTCCCATCTACGTACGGGTGCCCTTCCTTGAGGTTAATGATCCAGGGGAACCCTCAGGGCTGG AGACTCTGAAAGACACCGCCCCCACGGCTCATCAAGTCACACCTGCCCCTGGCTCTGCTCCCTCAGAC TCTGTTGGATCAGAAGGTCAAGGTGGTCTATGTTGCCCGAAACCCAAAGGACGTGGCGGTCTCCTACTAC CATTTCCACCGTATGGAAAAGGCGCACCCTGAGCCTGGGACCTGGGACAGCTTCCTGGAAAAGTTCATGG CTGGAGAAGTGTCCTACGGGTCCTGGTACCAGCACGTGCAGGAGTGGTGGGAGCTGAGCCGCACCC TGTTCTCTACCTCTTCTATGAAGACATGAAGGAGAACCCCAAAAGGGAGATTCAAAAGATCCTGGAGTTT GTGGGGCGCTCCCTGCCAGAGGAGACCATGGACTTCATGGTTCAGCACACGTCGTTCAAGGAGATGAAGA AGAACCCTATGACCAACTACACCACCGTCCCCCAGGAGCTCATGGACCACAGCATCTCCCCCTTCATGAG GAAAGGCATGGCTGGGGACTGGAAGACCACCTTCACCGTGGCGCAGAATGAGCGCTTCGATGCGGACTAT GCGGAGAAGATGGCAGGCTGCAGCCTCAGCTTCCGCTCTGAGCTG

> **ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT ACAAGGATGACGACGATAAGGTTTAA



SULT1A4 (NM_001017391) Human Tagged ORF Clone - RC204897

Protein Sequence: >RC204897 protein sequence

Red=Cloning site Green=Tags(s)

MELIQDTSRPPLEYVKGVPLIKYFAEALGPLQSFQARPDDLLINTYPKSGTTWVSQILDMIYQGGDLEKC NRAPIYVRVPFLEVNDPGEPSGLETLKDTPPPRLIKSHLPLALLPQTLLDQKVKVVYVARNPKDVAVSYY HFHRMEKAHPEPGTWDSFLEKFMAGEVSYGSWYQHVQEWWELSRTHPVLYLFYEDMKENPKREIQKILEF VGRSLPEETMDFMVQHTSFKEMKKNPMTNYTTVPQELMDHSISPFMRKGMAGDWKTTFTVAQNERFDADY AEKMAGCSLSFRSEL

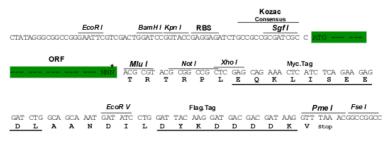
TRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Chromatograms: https://cdn.origene.com/chromatograms/mk6437 b07.zip

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_001017391

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:

- 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.

RefSeq: <u>NM 001017391.1</u>, <u>NP 001017391.1</u>

RefSeq Size: 1411 bp
RefSeq ORF: 887 bp
Locus ID: 445329
Cytogenetics: 16p11.2

Protein Pathways: Sulfur metabolism

MW: 34.2 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 a phenol

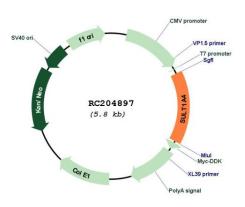
sulfotransferase with thermolabile enzyme activity. Four sulfotransferase genes are located on the p arm of chromosome 16, this gene and SULT1A3 arose from a segmental duplication.

Read-through transcription exists between this gene and the upstream SLX1B (SLX1

structure-specific endonuclease subunit homolog B) gene that encodes a protein containing

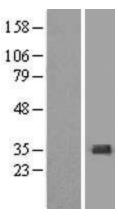
GIY-YIG domains. [provided by RefSeq, Nov 2010]

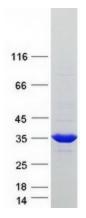
Product images:



Circular map for RC204897







Western blot validation of overexpression lysate (Cat# [LY422770]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC222321] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).

Coomassie blue staining of purified SULT1A4 protein (Cat# [TP304897]). The protein was produced from HEK293T cells transfected with SULT1A4 cDNA clone (Cat# RC204897) using MegaTran 2.0 (Cat# [TT210002]).