

Product datasheet for RC226995

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com

CN: techsupport@origene.cn

OriGene Technologies, Inc.

HSD3B7 (NM_001142778) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: HSD3B7 (NM_001142778) Human Tagged ORF Clone

Tag: Myc-DDK
Symbol: HSD3B7

Synonyms: CBAS1; PFIC4; SDR11E3

Vector: pCMV6-Entry (PS100001)

E. coli Selection: Kanamycin (25 ug/mL)

Cell Selection: Neomycin

ORF Nucleotide >RC226995 representing NM_001142778
Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

ATGGCCGACTCTGCACAGGCCCAGAAGCTGGTGTACCTGGTCACAGGGGGCTGTGGCTTCCTGGGAGAGC
ACGTGGTGCGAATGCTGCTGCAGCGGGAGCCCCGGCTCGGGAGCTGCGGGTCTTTGACCAACACCTGGG
TCCCTGGCTGGAGGAGCCTGAAGACAGGGCCTGTGAGGGTGACCCAGGCC
CATGAGGTGGCAGCAGCTGTGGCCGGAGCCCATGTGGTCATCCACACGGCTGGGCTGGTAGACGTGTTTG
GCAGGGCCAGTCCCAAGACCATCCATGAGGTCAACGTGCAGGGTACCCGGAACGTGATCGAGGCTTGTGT
GCAGACCGGAACACGGTTCCTGGTCTACACCAGCAGCATGGAAGTTGTGGGGCCTAACACCAAAGGTCAC
CCCTTCTACAGGGGCAACGAAGACACCCCATACGAAGCAGTGCACAGGCACCCCTATCCTTGCAGCAAGG
CCCTGGCCGAGTGGCTGGTCCTGGAGGCCAACGGGAGGAAGGCAATGTTGCCTGGATGCACGTGCTGGCA
GCCCGGGAGCTGGAGCAGCGGGCAACCC

GCCCGGGAGCTGGAGCAGCGGGCAACCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC226995 representing NM_001142778

Red=Cloning site Green=Tags(s)

 ${\tt MADSAQAQKLVYLVTGGCGFLGEHVVRMLLQREPRLGELRVFDQHLGPWLEELKTGPVRVTAIQGDVTQAHVVAAAVAGAHVVIHTAGLVDVFGRASPKTIHEVNVQGTRNVIEACVQTGTRFLVYTSSMEVVGPNTKGH}\\$

PFYRGNEDTPYEAVHRHPYPCSKALAEWLVLEANGRKAMLPGCTCWQPGSWSSGQP

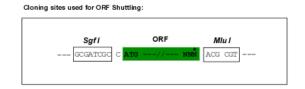
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

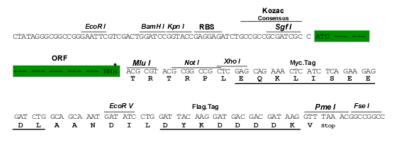
Restriction Sites: Sgfl-Mlul





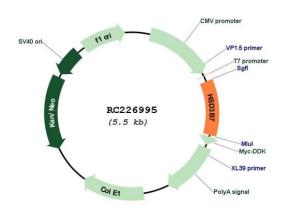
Cloning Scheme:





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

Plasmid Map:



ACCN: NM_001142778

ORF Size: 588 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 001142778.2</u>

RefSeq ORF: 591 bp
Locus ID: 80270
UniProt ID: Q9H2F3
Cytogenetics: 16p11.2

Protein Families: Transmembrane

Protein Pathways: Metabolic pathways, Primary bile acid biosynthesis

MW: 21.1 kDa

Gene Summary: This gene encodes an enzyme which is involved in the initial stages of the synthesis of bile

acids from cholesterol and a member of the short-chain dehydrogenase/reductase

superfamily. The encoded protein is a membrane-associated endoplasmic reticulum protein which is active against 7-alpha hydrosylated sterol substrates. Mutations in this gene are associated with a congenital bile acid synthesis defect which leads to neonatal cholestasis, a form of progressive liver disease. Multiple transcript variants encoding different isoforms

have been found for this gene. [provided by RefSeq, Dec 2008]