

Product datasheet for RC202468

HSD3B7 (NM_025193) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HSD3B7 (NM_025193) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	HSD3B7
Synonyms:	CBAS1; PFIC4; SDR11E3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC202468 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**C

ATGGCCGACTCTGCACAGGCCAGAAAGCTGGTGTACCTGGTCACAGGGGGCTGTGGCTTCTGGGAGAGC
ACGTGGTGCGAATGCTGCTGCAGCGGGAGCCCCGGCTCGGGGAGCTGCGGGTCTTTGACCAACACCTGGG
TCCCTGGCTGGAGGAGCTGAAGACAGGGCCTGTGAGGGTGACTGCCATCCAGGGGACGTGACCCAGGCC
CATGAGGTGGCAGCAGCTGTGGCCGAGCCCATGTGGTCATCCACACGGCTGGGCTGGTAGACGTGTTT
GCAGGGCCAGTCCAAGACCATCCATGAGGTCAACGTGCAGGGTACCCGGAACGTGATCGAGGCTTGTGT
GCAGACCGGAACACGGTTCCTGGTCTACACCAGCAGCATGGAAGTTGTGGGGCCTAACACCAAAGGTCAC
CCCTTCTACAGGGGCAACGAAGACACCCATACGAAGCAGTGCACAGGCACCCCTATCCTTGCAAGCAAGG
CCCTGGCCGAGTGGCTGGTCTGGAGGCCAACGGGAGGAAGTCCGTGGGGGGCTGCCCTGGTGACGTG
TGCCCTTCGTCCCACGGGCATCTACGGTGAAGGCCACCAGATCATGAGGGACTTCTACCGCCAGGGCCTG
CGCCTGGGAGGTTGGCTCTCCGGGCCATCCGGCCTCTGTGGAGCATGGCCGGTCTATGTGGCAATG
TTGCTGGATGCACGTGCTGGCAGCCCGGGAGCTGGAGCAGCGGGCAACCCTGATGGCGGCCAGGTATA
CTTCTGCTACGATGGATCACCTACAGGAGCTATGAGGATTTCAACATGGAGTTCTGGGCCCTGCGGA
CTGCGGCTGGTGGCGCCCGCCATTGCTGCCCTACTGGCTGTGGTGTCTGGCTGCCCTCAATGCC
TGCTGCAGTGGCTGCTGCGGCCACTGGTCTCTACGCACCCCTGCTGAACCCCTACACGCTGGCCGTGGC
CAACACCACCTTACCGTCAGCACCCGACAGGCTCAGCGCCATTTGCGCTATGAGCCCTGTTCTCGTGG
GAGGATAGCCGACCCGTACCATTCTCTGGGTACAGGCCGCTACGGTTACAGCCAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTAA



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Protein Sequence: >RC202468 protein sequence
Red=Cloning site Green=Tags(s)

MADSAQAQKLVYLVTTGGCGFLGEHVVRMLLQREPRLGELRVFDQHLGPWLEELKTGPVVRVTAIQGDVTQA
 HEVAAAAGAHVVIHTAGLVDFGRASPKEIHEVNVQGRNVEACVQTGTRFLVYTSSMEVVGPNTKGH
 PFYRGNEDTPYEAVHRHPYPCSKALAEWLVEANGRKVRGGLPLVTCALRPTGIYGEHQIMRDFYRQGL
 RLGGWLFRAIPASVEHGRVYVGNVAMHVLAAARELEQRATLMGGQVYFCYDGPSPYRSYEDFNMEFLGPCG
 LRLVGARPLLPYWLLVFLAALNALLQWLLRPLVLYAPLLNPYTLAVANTTFTVSTDKAQRHFGYEPLFSW
 EDSRTRTILWVQAATGSAQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6404_h07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_025193

ORF Size: 1107 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_025193.2](#), [NP_079469.2](#)

RefSeq Size: 2203 bp

RefSeq ORF: 1110 bp

Locus ID: 80270

UniProt ID: [Q9H2F3](#)

Cytogenetics: 16p11.2

Domains: 3Beta_HSD

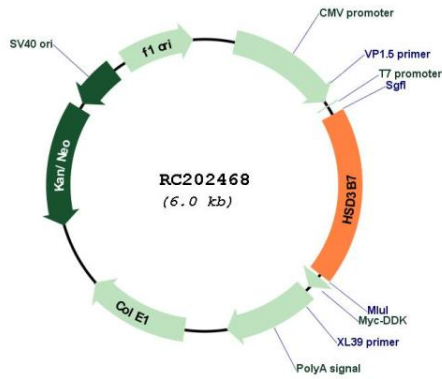
Protein Families: Transmembrane

Protein Pathways: Metabolic pathways, Primary bile acid biosynthesis

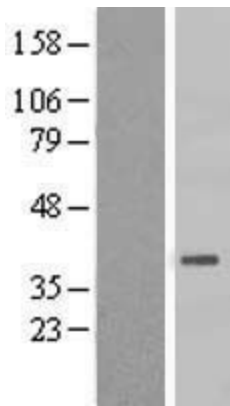
MW: 41 kDa

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 hydroxylated 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]

Product images:



Circular map for RC202468



Western blot validation of overexpression lysate (Cat# [LY410844]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202468 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).