

## Product datasheet for **RG226924**

### HSD3B7 (NM\_001142777) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** HSD3B7 (NM\_001142777) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** HSD3B7  
**Synonyms:** CBAS1; PFIC4; SDR11E3  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG226924 representing NM\_001142777  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCCGACTCTGCACAGGCCAGAAAGCTGGTGTACCTGGTCACAGGGGGCTGTGGCTTCTGGGAGAGC  
 ACGTGGTGC GAATGCTGCTGCAGCGGGAGCCCCGGCTCGGGGAGCTGCGGGTCTTTGACCAACACCTGGG  
 TCCCTGGCTGGAGGAGCTGAAGACAGGGCCTGTGAGGGTACTGCCATCCAGGGGACGTGACCCAGGCC  
 CATGAGGTGGCAGCAGCTGTGGCCGAGCCCATGTGGTCATCCACACGGCTGGGCTGGTAGACGTGTTT  
 GCAGGGCCAGTCCAAGACCATCCATGAGGTCAACGTGCAGGGTACCCGGAACGTGATCGAGGCTTGTGT  
 GCAGACCGGAACACGGTTCTGGTCTACACCAGCAGCATGGAAGTTGTGGGCCTAACACCAAAGGTCAC  
 CCCTTCTACAGGGGCAACGAAGACACCCATACGAAGCAGTGCACAGGCACCCCTATCCTTGCAAGCAAGG  
 CCCTGGCCGAGTGGCTGGTCTGGAGGCCAACGGGAGGAAGGCAATGTTGCCTGGATGCACGTGCTGGCA  
 GCCCGGGAGCTGGAGCAGCGGGCAACCC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >RG226924 representing NM\_001142777  
 Red=Cloning site Green=Tags(s)

MADSAQAQKLVYLVTTGGCGFLGEHVVRMLLQREPRLGELRVFDQHLGPWLEELKTGPVVRVTAIQGDVDTQA  
 HEVAAA VAGAHVVIHTAGLVDVFGRA SPKTIHEVNVQGTRNVEACVQTGTRFLVYTSSMEVVGPNTKGH  
 PFYRGNEDTPYEAVHRHPYPCSKALAEWLVL EANGRKAMLPGCTCWQPGSWSSGQP

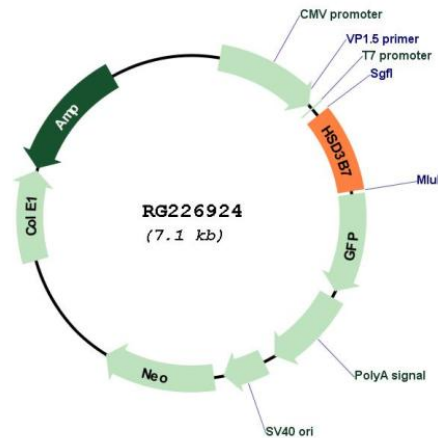
**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-MluI



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**Cloning Scheme:**

**Plasmid Map:**


**ACCN:** NM\_001142777

**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:** [NM\\_001142777.2](#)

**RefSeq Size:** 2233 bp

**RefSeq ORF:** 591 bp

**Locus ID:** 80270

**UniProt ID:** [Q9H2F3](#)

**Cytogenetics:** 16p11.2

**Protein Families:** Transmembrane

**Protein Pathways:** Metabolic pathways, Primary bile acid biosynthesis

**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]