

## Product datasheet for **MG216951**

### Hsd3b7 (NM\_001040684) Mouse Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Hsd3b7 (NM\_001040684) Mouse Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** Hsd3b7  
**Synonyms:** A1195443; BB098564  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >MG216951 representing NM\_001040684  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCAGACTCTGCACAGGTGCCAACACTGGTATACCTGGTCACAGGTGGCTGCGGCTTCTGGGGAAC  
ATATTGTTTCGGATGCTGCTGGAACGGGAGCCCAGGCTCCGGGAGCTGCGTGTCTTTGACCTGCACCTGAG  
TTCTTGGCTGGAGGAGCTGAAAGCAGGGCCTGTGCAGGTGACTGCCATCCAGGGGATGTGACTCAGGCC  
CATGAGGTGGCAGCAGCCATGTCTGGATCACATGTGGTCATCCATACAGCTGGGTTGGTGGATGTGTTT  
GGAAGGCCAGTCAAAGACCATCCAAAAGTCAACGTGCAGGGCACACAGAATGTGATTGATGCTTGTGT  
GCAGACTGGCACTCAGTACCTGGTCTACACGAGCAGCATGGAAGTGGTGGGCCTAACATCAAGGGCCAC  
CCCTTCTACAGGGCAATGAAGATACCCATATGAGGCAGTCCACAGCCATCCCTACCCATGCAGTAAAG  
CCCTTGTCTGAGCAGCTGGTCTCGAGGCCAATGGAAGGAAGTCAATGGAGGGCTACCCCTGGTGACATG  
TGCCCTTCGACCCACGGGCATTTATGGTGAAGTCAATCAGGTCATGAGAGACTTCTACTACCAGGGACTG  
CGCTTGGAGGTCTGCTATTTTCGGGCCGCTCCAGCTTCTGTGGAGCAGGTCGGGCTATGTTGGCAATG  
TTGCTTGGATGCACATACTGGTGGCCCGGAGCTGGAGCAGCGGGCAGCACTCATGGGTGGCCAGGTGTA  
TTTCTGCTATGATAAGTCACTTATAAAAGCTACGAGGACTTCAACATGGAGTTTCTGAGTCCCTGTGGT  
CTTCGACTGATAGCGCCACCCACTGCTGCCCTACTGGCTGCTAGTGTGCTGCTGCTGCTCAATGCC  
TGCTGCAGTGGCTGCTCCGCCACTGGTGTGTACACACCCCTGCTGAATCCCTACAGCTGGCTATGGC  
CAACACCACCTTTACTGTCACTACCAACAGGCACAGCGCATTGTTGGTACAAGCCCTCTTCTCATGG  
GAAGAGAGCAGGACCCGACCATTCACTGGGTGCAGGCGATGGAGGGTTCAGCTCGG

**ACCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA



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**Protein Sequence:** >MG216951 representing NM\_001040684  
 Red=Cloning site Green=Tags(s)

MADSAQVPTLVYLVTGGCGFLGEHIVRMLLEREPRLRELRVFDLHLSSWLEELKAGPVQVTAIQGDVTQA  
 HEVAAAMSGSHVVIHTAGLVDVFGKASPKTIHKVNVQGTQNVIDADCVQTGTQYL VYTSSMEVVGPNIKGH  
 PFYRGNEDTPYEAVHSHPYPCSKALAEQLVLEANGRKVNGGLPLVTCALRPTGIYGEHGQVMRDFYYQGL  
 RFGGRLFRAVPASVEHGRVYVGNVAVMMHILVARELEQRAALMGGQVYFCYDKSPYKSYEDFNMEFLSPCG  
 LRLIGAHPLLPYLLVLLATLNALLQWLLRPLVLYTPLLNPYTLAMANTTFTVSTNKAQRHFQYKPLFSW  
 EESRTRTIQWVQAMEGSAR

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001040684

**ORF Size:** 1026 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\\_001040684.1](#), [NP\\_001035774.1](#)

**RefSeq Size:** 1771 bp

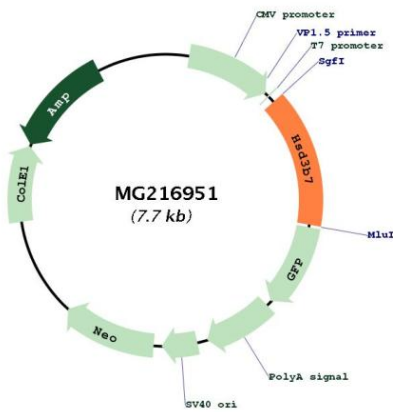
**RefSeq ORF:** 1029 bp

**Locus ID:** 101502

**Cytogenetics:** 7 F3

**Gene Summary:** The 3-beta-HSD enzymatic system plays a crucial role in the biosynthesis of all classes of hormonal steroids. HSD VII is active against four 7-alpha-hydroxylated sterols. Does not metabolize several different C(19/21) steroids as substrates. Involved in bile acid synthesis (PubMed:11067870). Plays a key role in cell positioning and movement in lymphoid tissues by mediating degradation of 7-alpha,25-dihydroxycholesterol (7-alpha,25-OHC): 7-alpha,25-OHC acts as a ligand for the G protein-coupled receptor GPR183/EBI2, a chemotactic receptor for a number of lymphoid cells (PubMed:22999953).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MG216951