

## Product datasheet for MR216951

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

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Hsd3b7 (NM_001040684) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Hsd3b7
Synonyms:	A1195443; BB098564
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR216951 representing NM_001040684 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCAGACTCTGCACAGGTGCCAACACTGGTATACCTGGTCACAGGTGGCTGCGGCTTCTGGGGAAC  
ATATTGTTTCGGATGCTGCTGGAACGGGAGCCCAGGCTCCGGGAGCTGCGTGTCTTTGACCTGCACCTGAG  
TTCTTGGCTGGAGGAGCTGAAAGCAGGGCCTGTGCAGGTGACTGCCATCCAGGGGATGTGACTCAGGCC  
CATGAGGTGGCAGCAGCCATGTCTGGATCACATGTGGTCATCCATACAGCTGGGTTGGTGGATGTGTTT  
GGAAGGCCAGTCAAAGACCATCCAAAAGTCAACGTGCAGGGCACACAGAATGTGATTGATGCTTGTGT  
GCAGACTGGCACTCAGTACCTGGTCTACACGAGCAGCATGGAAGTGGTGGGCCTAACATCAAGGGCCAC  
CCCTTCTACAGGGCAATGAAGATACCCATATGAGGCAGTCCACAGCCATCCCTACCCATGCAGTAAAG  
CCCTTGTGAGCAGCTGGTCTCGAGGCCAATGGAAGGAAGTCAATGGAGGGCTACCCCTGGTGACATG  
TGCCCTTCGACCCACGGGCATTTATGGTGAAGTTCATCAGGTCATGAGAGACTTCTACTACCAGGGACTG  
CGCTTTGGAGGTGCTCTATTTTCGGGCCGTCCCAGCTTCTGTGGAGCAGGTCGGGCTATGTTGGCAATG  
TTGCTTGGATGCACATACTGGTGGCCCGGGAGCTGGAGCAGCGGGCAGCACTCATGGGTGGCCAGGTGTA  
TTTCTGCTATGATAAGTCACTTATAAAAGCTACGAGGACTTCAACATGGAGTTTCTGAGTCCCTGTGGT  
CTTCGACTGATAGGCGCCACCCACTGCTGCCCTACTGGCTGCTAGTGTGCTGCTGCTACCCTCAATGCC  
TGCTGCAGTGGCTGCTCCGCCACTGGTGTGTACACACCCTGCTGAATCCCTACACGCTGGCTATGGC  
CAACACCACCTTTACTGTCACTACCAACAGGCACAGCGCATTGTTGGCTACAAGCCCTCTTCTCATGG  
GAAGAGAGCAGGACCCGACCATTTCAGTGGGTGCAGGCGATGGAGGGTTCAGCTCGG

**ACGGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTAA



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**Protein Sequence:** >MR216951 representing NM\_001040684  
 Red=Cloning site Green=Tags(s)

MADSAQVPTLVYLVTTGGCGFLGEHIVRMLLEREPRLRELRFVDFLHLSSWLEELKAGPVQVTAIQGDVTQA  
 HEVAAAMSGSHVVIHTAGLVDFGKASPKTIHKVNVQGTQNVIDADCVQTGTQYL VYTSSMEVVGPNIKGH  
 PFYRGNEPTPYEAVHSHPYPCSKALAEQLVLEANGRKVNGGLPLVTCALRPTGIYEGEYHVMRDFYYQGL  
 RFGGRLFRAVPASVEHGRVYVGNVAVMHILVARELEQRAALMGGQVYFCYDKSPYKSYEDFNMEFLSPCG  
 LRLIGAHPLLPYWLLVLLATLNALLQWLLRPLVLYTPLLNPYTLAMANTTFTVSTNKAQRHFGYKPLFSW  
 EESRTRTIQWVQAMEGSAR

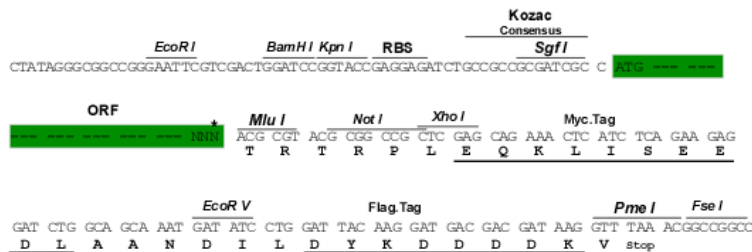
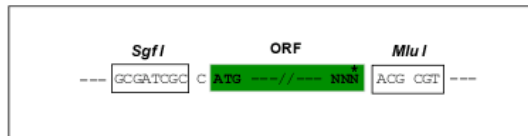
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001040684

**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.

**RefSeq Size:** 1771 bp

**RefSeq ORF:** 1029 bp

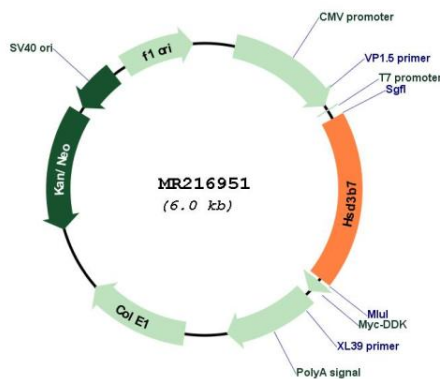
**Locus ID:** 101502

**Cytogenetics:** 7 F3

**MW:** 38.8 kDa

**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 MR216951