

Product datasheet for MR218387

Hsd3b7 (NM_133943) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Hsd3b7 (NM_133943) 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:	>MR218387 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCAGACTCTGCACAGGTGCCAACACTGGTATACCTGGTCACAGGTGGCTGCGGCTTCTGGGGAAC
ATATTGTTCCGGATGCTGCTGGAACGGGAGCCCAGGCTCCGGGAGCTGCGTGTCTTTGACCTGCACCTGAG
TTCTTGGCTGGAGGAGCTGAAAGCAGGGCCTGTGCAGGTGACTGCCATCCAGGGGATGTGACTCAGGCC
CATGAGGTGGCAGCAGCCATGTCTGGATCACATGTGGTCATCCATACAGCTGGGTTGGTGGATGTGTTT
GGAAGGCCAGTCAAAGACCATCCAAAAGTCAACGTGCAGGGCACACAGAATGTGATTGATGCTTGTGT
GCAGACTGGCACTCAGTACCTGGTCTACACGAGCAGCATGGAAGTGGTGGGCCTAACATCAAGGGCCAC
CCCTTCTACAGGGCAATGAAGATACCCATATGAGGCAGTCCACAGCCATCCCTACCCATGCAGTAAAG
CCCTTGTGAGCAGCTGGTCTCGAGGCCAATGGAAGGAAGTCAATGGAGGGCTACCCCTGGTGACATG
TGCCCTTCGACCCACGGGCATTTATGGTGAAGTCAATCAGGTCATGAGAGACTTCTACTACCAGGGACTG
CGCTTTGGAGGTGCTCTATTTCCGGCCGTCCCAGCTTCTGTGGAGCACGGTCGGGCTATGTTGGCAATG
TTGCTTGGATGCACATACTGGTGGCCCGGGAGCTGGAGCAGCGGGCAGCACTCATGGGTGGCCAGGTGTA
TTTCTGCTATGATAAGTCACTTATAAAAGCTACGAGGACTTCAACATGGAGTTTCTGAGTCCCTGTGGT
CTTCGACTGATAGGCGCCACCCACTGCTGCCCTACTGGCTGCTAGTGTGCTGCTACCCTCAATGCC
TGCTGCAGTGGCTGCTCCGCCACTGGTGTGTACACACCCTGCTGAATCCCTACAGCTGGCTATGGC
CAACACCACCTTTACTGTCACTACCAACAGGCACAGCGCATTGTTGGCTACAAGCCCTCTTCTCATGG
GAAGAGAGCAGGACCCGACCATTCACTGGGTGCAGGCGATGGAGGGTTCAGCTCGG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTAA



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Protein Sequence: >MR218387 protein sequence
 Red=Cloning site Green=Tags(s)

MADSAQVPTLVYLVTTGGCGFLGEHIVRMLLEREPRLRELRVFDLHLSSWLEELKAGPVQVTAIQGDVTQA
 HEVAAAMSGSHVVIHTAGLVDFGKASPKTIHKVNVQGTQNVIDADCVQTGTQYL VYTSSMEVVGPNIKGH
 PFYRGNEPTPYEAVHSHPYPCSKALAEQLVLEANGRKVNGGLPLVTCALRPTGIYEGHGQVMRDFYYQGL
 RFGGRLFRAVPASVEHGRVYVGNVAWMHILVARELEQRAALMGGQVYFCYDKSPYKSYEDFNMEFLSPCG
 LRLIGAHPLLPYWLLVLLATLNALLQWLLRPLVLYTPLLNPYTLAMANTTFTVSTNKAQRHFGYKPLFSW
 EESRTRTIQWVQAMEGSAR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_133943

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_133943.2](#), [NP_598704.2](#)

RefSeq Size: 1823 bp

RefSeq ORF: 1110 bp

Locus ID: 101502

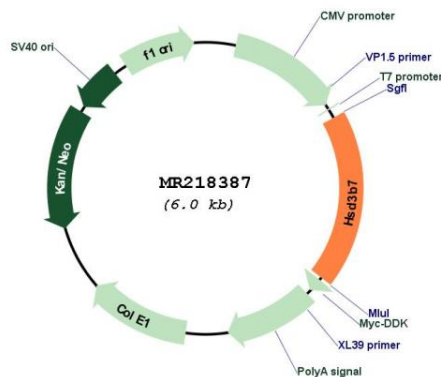
UniProt ID: [Q9EQC1](#)

Cytogenetics: 7 F3

MW: 41.1 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 MR218387