

Product datasheet for MR201559

Hsd17b12 (BC037620) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Hsd17b12 (BC037620) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Hsd17b12
Synonyms: KIK-I, Kik1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR201559 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGTCATACGAGTATCCGGAATACTTTCTGGAAATCCCGACTTGGACAACACCATCAAGAACTGATAA
 ATATTAATGTGCTTCCGTTTGAAGGTGACACGCTTGGTGTGCCTGGCATGGTAGAAAGATCTAAAGG
 GGTGATTCTCAACATCTCCTCAGCCAGTGGCATGCTCCAGTTCATTGTTGACAATCTACTCTGCAACC
 AAGGCCTTTGTAGATTTCTCTCAGTGCCTCCATGAGGAGTAAAGAGCAAGGGCATCTTTGTGCAGA
 GTGTCATGCCATACCTTTGTAGCTACAAAACCTGGCAAAAATACAGAAGCCGACTTTGGATAAGCCCTCTGC
 AGAGACATTTGTGAAGTCTGCAATTAACAGTAGGTTTGCAGACCCGAACCACTGGATATGTGATCCAC
 TCTCTCATGGGCTCAATAAACTCAATCATGCCTCGTTGGATGTATTTAAATAATCATGGGTTTCAGCA
 AGTCTTTGCGGAATCGCTACCTGAAGAAAAGGAAGAAGAAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR201559 protein sequence
 Red=Cloning site Green=Tags(s)

MSYEYPEYFLEIPDLNTIKKLININVLSVCKVTRLVLPGMVERSKGVILNISSASGMLPVLLTIYSAT
 KAFVDFFSQCLHEEYKSKGIFVQSVMPYLVA TKLAKIQKPTLDKPSAETFVKSIAIKTVGLQTRTTGYVIH
 SLMGSINSIMPRWYFKIIMGFSKSLRNRYLKKRKKK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: Sgfl-MluI



Cloning Scheme:


ACCN: BC037620

ORF Size: 531 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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:

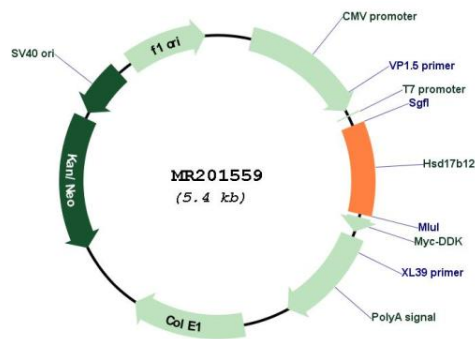
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store 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: [BC037620](#), [AAH37620](#)

RefSeq Size: 1808 bp
 RefSeq ORF: 533 bp
 Locus ID: 56348
 Cytogenetics: 2 E1
 MW: 20.1 kDa

Gene Summary: Catalyzes the second of the four reactions of the long-chain fatty acids elongation cycle. This endoplasmic reticulum-bound enzymatic process, allows the addition of two carbons to the chain of long- and very long-chain fatty acids/VLCFAs per cycle. This enzyme has a 3-ketoacyl-CoA reductase activity, reducing 3-ketoacyl-CoA to 3-hydroxyacyl-CoA, within each cycle of fatty acid elongation. Thereby, it may participate in the production of VLCFAs of different chain lengths that are involved in multiple biological processes as precursors of membrane lipids and lipid mediators. May also catalyze the transformation of estrone (E1) into estradiol (E2) and play a role in estrogen formation.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR201559