

Product datasheet for **MR225241**

Hacd1 (NM_013935) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Hacd1 (NM_013935) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Hacd1
Synonyms: Ptpla
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR225241 representing NM_013935
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGTCCAGTGAGGAGGACGGCACCAACGGCGCCTCCGAGGCCAGCGACGAGAAGGAAGCCGCCGGCA
AGCGGAGACGCCTAGGCTTACTGGCCACCGCTGGCTCACCTTCTACAATATCGCCATGACGGCCGGGTG
GTTGGTCTTGCTATTGCTATGGTACGCTTTTATATGGAAAAGGAACACACAGAGGTTTATATAAAGC
ATTCAGAAGACACTTAAGTTTTTCAAACATTTGCTTTGCTTGAGGTAGTCCATTGTCTGATCGGAATTG
TACCCACTTCTGTGCTTGTGACTGGGTCCAAGTGAGCTCAAGAATCTTCATGGTGTGGCTCATTACTCA
CAGTATAAAACCCATCCAGAATGAAGAGAGCGTGGTGCTTTTCTGGTCTCCTGGACTGTGACCGAGATC
ACTCGCTATTCTTCTACACATTCAGTCTCCTCGACCACTTGCCGCACTTCATTAATGGCCAGATACA
ATTTGTTTATCATCTTATATCCCGTTGGAGTTGCTGGGAACTTCTCACAATATACGCCGCTTGCCTTA
CGTAAAGAAGTCAGGAATGTTCTCAGTACGGCTTCCCAACAAGTACAATGTTTCTTTTGACTACTACTAT
TTTCTTCTATAACCATGGCCTCTATATACCGTTGTTTCTCAGCTCTATTTTCATATGTTACGTCAGA
GAAGAAAGGTGCTCCACGGGGAGGTGATCGCGGAGAAGGACGAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

Protein Sequence: >MR225241 representing NM_013935
Red=Cloning site Green=Tags(s)

MASSEEDGTNGASEASDEKEAAGKRRRLGLLATAWLTFYNIAMTAGWLVLAIAMVRFYMEKGTHRGLYKS
 IQKTLKFFQTFALLEVVHCLIGIVPTSVLVTGVQVSSRIFMVWLITHSIKPIQNEESVVLFLVSWTVTEI
 TRYSFYTFSLDLHLPHFIKWARYNLFIIILYPVGVAGELLTIYAALPYVKKSGMFSVRLPNKYNVSDFYDY
 FLLITMASYIPLFPQLYFHMLRQRKVLHGEVIAEKDD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9024_e01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_013935

ORF Size: 744 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_013935.3](#), [NP_038963.3](#)

RefSeq Size: 1015 bp

RefSeq ORF: 747 bp

Locus ID: 30963

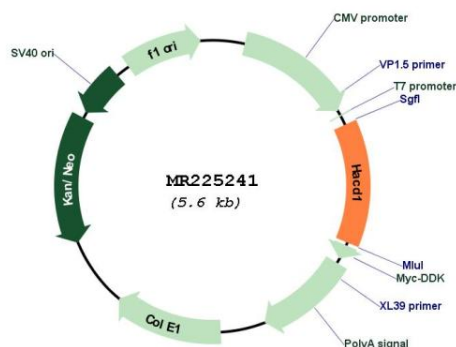
UniProt ID: [Q9QY80](#)

Cytogenetics: 2 A1- A2

MW: 29 kDa

Gene Summary: Catalyzes the third 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 catalyzes the dehydration of the 3-hydroxyacyl-CoA intermediate into trans-2,3-enoyl-CoA, within each cycle of fatty acid elongation. Thereby, it participates in the production of VLCFAs of different chain lengths that are involved in multiple biological processes as precursors of membrane lipids and lipid mediators.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR225241