

Product datasheet for **MG225241**

Hacd1 (NM_013935) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Hacd1 (NM_013935) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Hacd1
Synonyms:	Ptpla
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG225241 representing NM_013935 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGTCCAGTGAGGAGGACGGCACCAACGGCGCCTCCGAGGCCAGCGACGAGAAGGAAGCCGCCGGCA
AGCGGAGACGCCTAGGCTTACTGGCCACCGCTGGCTCACCTTCTACAATATCGCCATGACGGCCGGGTG
GTTGGTTCTTGCTATTGCTATGGTACGCTTTTATATGGAAAAAGGAACACACAGAGGTTTATATAAAGC
ATTCAGAAGACACTTAAGTTTTTCAAACATTTGCTTTGCTTGAGGTAGTCCATTGTCTGATCGGAATTG
TACCCACTTCTGTGCTTGTGACTGGGTCCAAGTGAAGTCAAGAATCTTCATGGTGTGGCTCATTACTCA
CAGTATAAAACCCATCCAGAATGAAGAGAGCGTGGTGCTTTTCTGGTCTCCTGGACTGTGACCGAGATC
ACTCGCTATTCTTCTACACATTGAGTCTCCTCGACCACTTGCCGCACTTCAATAAATGGCCAGATACA
ATTTGTTTATCATCTTATATCCCGTTGGAGTTGCTGGGAACTTCTCACAATATACGCCGCTTGCCTTA
CGTAAAGAAGTCAGGAATGTTCTCAGTACGGCTTCCCAACAAGTACAATGTTTCTTTTGACTACTACTAT
TTTCTTCTATAACCATGGCCTCTATATACCGTTGTTTCTCAGCTCTATTTTCATATGTTACGTCAGA
GAAGAAAGGTGCTCCACGGGGAGGTGATCGCGGAGAAGGACGAT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG225241 representing NM_013935
 Red=Cloning site Green=Tags(s)

MASSEEDGTNGASEASDEKEAAGKRRRLGLLATAWLT FYNIAMTAGWLVLAIAMVRFYMEKGTHRGLYKS
 IQKTLKFFQTFALLEVVHCLIGIVPTSVLVTGVQVSSRIFMVWLITHSIKPIQNEESVVLFLVSWTVTEI
 TRYSFYTFSLDLPHFIKWARYNLFII LYPVGVAGELLTIYAALPYVKKSGMFSVRLPNKYNVSDFYDY
 FLLITMASYIPLFPQLYFHMLRQRKVLHGEVIAEKDD

TRTRPLE - GFP Tag - V

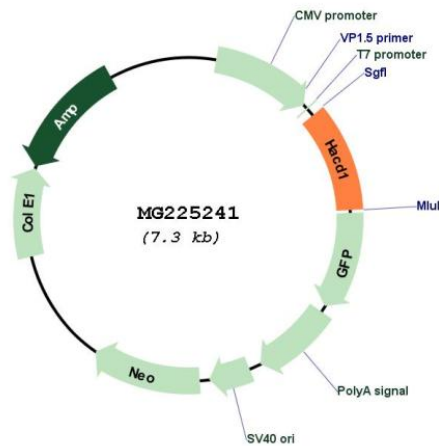
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



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:	<ol style="list-style-type: none">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
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]