

Product datasheet for **MG210264**

Ehhadh (NM_023737) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ehhadh (NM_023737) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ehhadh
Synonyms:	1300002P22Rik; HD; L-PBE; LBFP; LBP; MFP; MFP1; PBFE
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG210264 representing NM_023737
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCTGAGTATCTGAGGCTGCCCACTCCCTGGCTATGATCCGCCTCTGCAATCCACGGTCAATGCCA
 TCAGTCCAAGTGAATCACAGAAGTAAGGAATGGACTCCAGAAAGCTAGTTTGGACCATACGGTTAGAGC
 CATAGTGATCTGTGGAGCAAATGACAACTTCTGTGCAGGTGCTGATATCCATGGCTTTAAATCTCCCACT
 GGCCTTACATTAGGAAGCTTGGTAGATGAAATACAGCGATACCAGAAGCCAGTGGTGGCCGCCATCCAAG
 GCGTGGCTCTTGGAGGAGGACTAGAGCTGGCCTTGGGCTGCTACTATCGGATTGCCAATGCAAAGGCTCG
 TGTGGCTTCCCGAAGTGATGCTGGGAATTCTCCTGGTGAAGAGGAACGCAGCTTCTACCCAGGGTC
 GTTGGAGTTCTGTTGCTCTTGACTTAATTACCTCAGGAAGACATATTTCAACAGATGAAGCACTCAAGC
 TTGGAATTCTGGATGTAGTTGTAAGTCAAGCCAGTGAAGAAGCCATCAAATTTGCTCAGACGGTTAT
 AGGTAAACCCATAGAACCCCGCAGGATCCTAAACAAGCCAGTCCCAAGCTTGCCCAACATGGACAGTGTT
 TTTGCAGAAGCCATTGCCAAGGTACGGAAGCAGTACCCTGGCCGCTGGCTCCGGAGACTTGTGTCCGTT
 CAGTCCAGGCCTCCGTGAAGCATCCATATGAAGTGGCCATCAAGGAAGAAGCAAAGCTGTTTATGTACCT
 TCGGGGTTCGGGCGAGGCTAGAGCCCTGCAGTACGCCTTTTTTGGTGAAGTCTGCAAATAAGTGGTCA
 ACTCCCTCAGGAGCATCTTGAAAACAGCATCTGCTCAACCCGCTCCTCGGTTGGTGTCTTGGCTTGG
 GAACGATGGGCCGAGGCATCGCCATCTCTTTTGAAGGGTGGGGATCCCTGTGGTTGCTGTAGAGTCAGA
 CCCAAGCAGCTAGATACTGCAAAGAAGATAATAACTTCCACCTTGAAAAGGAAGCATCGAAGAGTGGC
 CAAGCTTCAGCAAACCAACCTCAGGTTCTCCTCATCCCAAAGGAGCTTTCGAGTGTGGATTTAGTGA
 TTGAAGCAGTGTTCGAAGATATGAACCTGAAGAAGAAGTCTTCGCTGAAGTGTGCAAGCCCTGCAAGCC
 GGGAGCCTTTCTGTGCACCAATACCTCAGCACTGGATGTGGATGACATTGCTTCTTCCACAGATCGCCCC
 CAGCTGGTATTGGCACCACTTCTTCTCCCCAGCCACATCATGAGGTTACTAGAGGTCATTCTAGCC
 GATACTCTTCCCCACTACCATCGCCACAGTCATGAGCTTATCCAAAAGGATTGGAAAGATTGGAGTCGT
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 ATAGAGGAAGGTAGTAAGCCAGAGGATGTAGATGGGGTCTTAGAAGAGTTTGGTTTTAGAATGGGACCT
 TCAGGGTGTCTGACCTCGCAGGGCTAGATGTGGGTTGAAAAGTTCGAAAGGGCAAGGCCTTACTGGACC
 GTCCTTACCTCCAGGAACCCCAACCGAAAGAGGGGCAATACCAGGTAATCCCAATTGCTGATATGCTC
 TGTGAAGCTGGGCGATTTGGTCAAGACAGGTAAGGGCTGGTATCAGTATGACAAGCCACTGGGTGCA
 TCCAAAACCTGATCCCTGGCTTTCTGAGTTTCTGTACAGTATAGAGAAACCCATCACATCAAGCAGCG
 CTCCATCAGCAAGGAGGAAATCCTGGAGCGTTGCTTATATCCCTTATCAACGAGGCATTCGCATCTTG
 GAGGAGGGGATGGCCGCTAGCCCAGAGCACATTGATGTCATCTACTTGCATGGGTATGGGTGGCCAAAGC
 ACGTGGGTGGGCCATGTACTATGCTGCCTCAGTTGGGCTGCCACAGTTCTAGAGAAATTGCAGAAATA
 TTACAGACAGAATCCTGACATCCCCAGCTGGAGCCAGTGACTACCTGAGGAGGCTGGTTGCCAGGGA
 AGCCCTCTCTGAAAGAATGGCAAAGCTTGGCAGGACCCATAGCAGCAAATG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG210264 representing NM_023737
 Red=Cloning site Green=Tags(s)

MAEYLRLPHSLAMIRLCNPPVNAISPTVITEVRNGLQKASLDHTVRAIVICGANDNFCAGADIHGFKSPT
 GLTLGSLVDEIQRYQKPVVAAIQVALGGGLELALGCHYRIANAKARVGFPEVMLGILPGARGTQLLPRV
 VGVPPVALDLITSGRHISTDEALKLGILDVVVKSDFVEEAIKFAQTIVIGKPIEPRRILNKPVPSLPNMDSV
 FAEIAIAKVRKQYPGRAPETCVRSVQASVKHPYEVAIKEEAKLFMYLRGSGQARALQYAFFAEKSANKWS
 TPSGASWKTASAPVSSVGLGLTMRGIAISFARVGI PVVAVESDPKQLDTAKKIITSTLEKEASKSG
 QASAKPNLRFSSSTKELSSVDLVIEAVFEDMNLKVKVFAEL SALCKPGAF LCTNTSALDVDDIASSTDRP
 QLVIGTHFFSPA HMRLLLEVIPSRYSSPTTIATVMSLSKRIGKIGVVVNGCYGFVGNRMLAPYYNQGYFL
 IEEGSKPEDVDGVLEEFGRMGPFVSDLAGLDVGVKVRKGGQLTGP SLPPGTPTRKRNTRYSP IADML
 CEAGRFGQKTGKGYQYDKPLGRIHKPDPWLSEFLSQYRETHHIKQRSISKEEILERCLYSLINEAFRIL
 EEGMAASPEHIDVIY LHGYGWPRHVGGPMYYAASVGLPTVLEKLQKYRQNP DIPQLEPSDYL RRLVAQG
 SPPLKEWQSLAGPHSSKL

TRTRPLE - GFP Tag - V

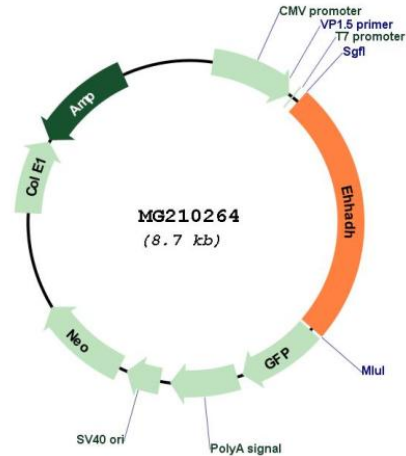
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_023737

ORF Size: 2154 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_023737.3](#)

RefSeq Size: 2993 bp

RefSeq ORF: 2157 bp

Locus ID: 74147

UniProt ID: [Q9DBM2](#)

Cytogenetics: 16 B1

Gene Summary: Peroxisomal trifunctional enzyme possessing 2-enoyl-CoA hydratase, 3-hydroxyacyl-CoA dehydrogenase, and delta 3, delta 2-enoyl-CoA isomerase activities. Catalyzes two of the four reactions of the long straight chain fatty acids peroxisomal beta-oxidation pathway. Optimal isomerase for 2,5 double bonds into 3,5 form isomerization in a range of enoyl-CoA species. Also able to isomerize both 3-cis and 3-trans double bonds into the 2-trans form in a range of enoyl-CoA species (By similarity). With HSD17B4, catalyzes the hydration of trans-2-enoyl-CoA and the dehydrogenation of 3-hydroxyacyl-CoA, but with opposite chiral specificity (Probable). Regulates the amount of medium-chain dicarboxylic fatty acids which are essential regulators of all fatty acid oxidation pathways (PubMed:24075987). Also involved in the degradation of long-chain dicarboxylic acids through peroxisomal beta-oxidation (By similarity). [UniProtKB/Swiss-Prot Function]