

Product datasheet for **RC223298**

ADHFE1 (NM_144650) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ADHFE1 (NM_144650) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ADHFE1
Synonyms:	ADH8; HMFT2263; HOT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC223298 representing NM_144650
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCCGCTGCCGCCGAGCCCGGGTTCGGTACTTGTGAGGCAACTGCAACCGCGCAGCGTGCCAGTGCC
 CAACTCATTCTCATACTTACTCCCAAGCCCTGGACTTTCACCTTCTGGGAAAACAACAGATTATGCCTT
 TGAGATGGCTGTTTCAAATATTAGATATGGAGCAGCAGTTACAAAGGAAGTAGGAATGGACCTAAAAAAC
 ATGGGTGCTAAAAATGTGTGCTTGTGATGACAGACAAGAACCCTCCTCAAGCTCCCTCCTGTGCAAGTAGCTA
 TGGATTCCCTAGTGAAGAATGGCATCCCCTTACGGTTTATGATAATGTGAGAGTGAACCAACGGATTC
 AAGCTTACGGAAGCTATTGAGTTTGCCAAAAGGGAGCTTTTGTGCCTATGTTGCTGTCGGTGGTGGC
 TCTACCATGGACACCTGAAGGCTGCTAATCTGTATGCATCCAGCCCTATTCTGATTTCTAGATTATG
 TCAGTGCCCCATTGGCAAGGAAAGCCTGTGTCTGTGCCTCTTAAGCCTCTGATTGCAGTGCCAACTAC
 CTCAGGAACCGGGAGTAAAACACTGGGGTTGCCATTTTGTACTGAACACTTGAAAGTAAAAATTGGC
 ATCACTTCGAGAGCCATCAAACCCACACTGGGACTGATTGATCCTCTGCACACCCCTCCACATGCCTGCC
 GAGTGGTCGCAACAGTGGCTTTGATGTCTTTGCCATGCCCTGGAGTCATACACCACCCTGCCCTACCA
 CCTGCGGAGCCCTGCCCTTCAAATCCCATCACACGGCCTGCGTACCAGGGCAGCAACCCAAATCAGTGAC
 ATTTGGGCTATCCACGCGCTGCGGATCGTGGCTAAGTATCTGAAGAGGGCTGTCAGAAATCCCGATGATC
 TTGAAGCAAGGTCTCATATGCACCTGGCAAGTGCCTTTGCTGGCATCGGCTTTGGAATGCTGGTGTTC
 TCTGTGCCATGGAATGTCTTACCAATTCAGGTTTAGTGAAGATGTATAAGCAAAGGATTACAATGTG
 GATCACCCACTGGTGCCCATGGCCTTCTGTGGTGTCTACGTCACCGCCAGCGGTGTTCACTTTCACGGCCC
 AGATGTTTCCAGAGCGACACCTGGAGATGGCAGAAATACTGGGAGCCGACACCCGCACTGCCAGGATCCA
 AGATGCAGGGCTGGTGTGGCAGACAGCTCCGAAATTCCTTATTCGATCTGGATGTTGATGATGGCCTA
 GCAGCTGTTGGTTACTCAAAGCTGATATCCCGCACTAGTAAAAGAACGCTGCCCCAGGAAAGGGTCA
 CCAAGCTTGCACCCTGTCCCGAGTCAAGAGGATCTGGCTGCTGTTGAAGTTCATGAAACTGTA
 T

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC223298 representing NM_144650
 Red=Cloning site Green=Tags(s)

MAAAARARVAYLLRQLQRAACQCPTHSHTYSQAPGLSPSGKTTDYAFEMAVSNIRYGAAVTKEVGMDLKN
 MGAKNVCLMTDKNL SKLPPVQVAMDSL VKNGIPFTVYDNRVPEPTDSSFMEIEFAQKGFADAYVAVGGG
 STMDTCKAANLYASSPHSDFLDYVSAPIGKGPVSVPLKPLIAVPTTSGTGETTGVAIFDYEHLKVKIG
 ITSRAIKPTLGLIDPLHTLHMPARVVANSFGDVLCHALESYTTLPYHLRSPCPSNPITRPAYQGSNPISD
 IWAHALRIVAKYLKRAVRNPDDLEARSHMLASAFAGIGFNAGVHLCHGMSYPI SGLVKMYKAKDYNV
 DHPLVPHGLSVVLTSPAVFTFTAQMFPERHLEMAEILGADTRTARIQDAGLVLADTLRKFLLFDLVDVDDGL
 AAVGYSKADIPALVKGTLQPQERVTKLAPCPQSEEDLAALFEASMKLY

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8120_h01.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_144650

ORF Size: 1401 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.

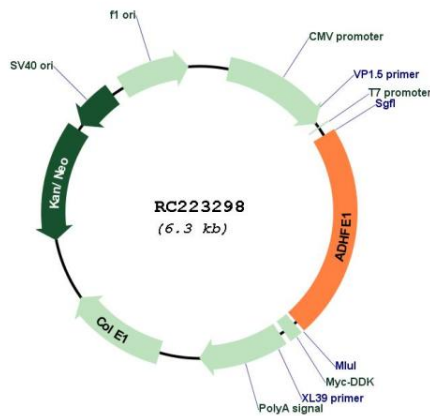
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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.

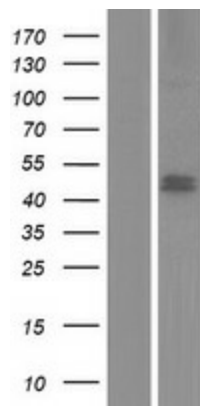
RefSeq: [NM_144650.3](#)
 RefSeq Size: 1907 bp
 RefSeq ORF: 1404 bp
 Locus ID: 137872
 UniProt ID: [Q8IWW8](#)
 Cytogenetics: 8q13.1
 Domains: Fe-ADH
 MW: 50.8 kDa

Gene Summary: The ADHFE1 gene encodes hydroxyacid-oxoacid transhydrogenase (EC 1.1.99.24), which is responsible for the oxidation of 4-hydroxybutyrate in mammalian tissues (Kardon et al., 2006 [PubMed 16616524]).[supplied by OMIM, Mar 2008]

Product images:



Circular map for RC223298



Western blot validation of overexpression lysate (Cat# [LY408191]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223298 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).