

## Product datasheet for **RN206998**

### **Adhfe1 (NM\_001025423) Rat Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Adhfe1 (NM_001025423) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Adhfe1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

**Fully Sequenced ORF:** >RN206998 representing NM\_001025423  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCCGAGCTGCACGCGCTCGAGTGACACATTTGCTGAGGCACCTGCAAAGCACAGCATGCCAGTGTC  
 CAACTCATTCTCATACCTACTCCCAAGTCCCTGGACTCTCACCTCAGGAAAAACAACGGATTATGCATT  
 TGAGATGGCGGTCTCGAACATTAGATATGGAGCAGGGTTACAAAGGAAGTGGGCATGGATCTACAGAAT  
 ATGGGAGCTAAGAATGTCTGCCTGATGACAGACAAGAACCCTCCAGCTCCCTCCTGTCCAAATAGTTA  
 TGGATTCCCTATCGAAGAATGGCATTAGTTTTAGGTTTATGACAACGTGAGGGTGGAGCCTACAGACGG  
 AAGCTTCATGGATGCGATTGAATTTGCTAAAAAGGGAGCCTTTGATGCCTATGTTGCTGTGGTGGGGC  
 TCCACCATGGACACCTGTAAGCCGCTAATCTGTACGCATGCAGCCCTCACTCTGAGTTCCTTGATTATG  
 TCAATGCCCCATTGGGAAGGGGAAGCCAGTAAGTGTGCCTCTTAAACCTCTGATCGCAGTTCCAACCTAC  
 CTGGGGACTGGCAGTGAGACTACGGGGTCGCCATTTTACTGATGAACATTTGAAAGTAAAACTGGA  
 ATTGCTTCACGGGCCATCAAACCCACCCTGGGGCTGGTTGATCCCCTGCATACTCTCCACATGCCTTGCC  
 AGGTGGTTGCCAACAGTGCTTCGATGTCTTTGCCATGCCTGGAGTCATACACCGCCATTCCCTACAG  
 CATGAGGAGCCCCTGCCCTTCCAATCCCATCCAACGACCAGCATACCAGGGTAGCAACCCCAATCAGTGAC  
 ATCTGGGCAGTCCATGCACTGCGCATCGTTGCCAAATATCTGAAGAGGGCTGTCAGAAACCTGACGATC  
 TGAAGCAAGGTCTAGCATGCATTGGCAAGCGCCTTCGCTGGCATTGGCTTCGGAACGCCGGTGTTC  
 TCTGTGCCATGGCATGTCTTACCAATTCAGGTTTATGTAAGACATACAAAGCCAAGGAATACAATGTG  
 GATCACCTCTGGTGCCCATGGCCTCTCTGTGGTGTCTCACCTCTCCCGCAGTGTTCACCTTCACAGCCC  
 AGATGTTTCCAGAGCGGCACCTGGAGACGGCAGAAATATTAGGAGCCAACATTGCGACCAGCAAGATCCA  
 AGATGCCGGCCTGTGTTGGCAGATGCTCTCCGAAAATTCCTATTTGACCTAAATGTTGATGACGGTCTC  
 GCTGCCCTTGGTTATTCTAAAGATGACATTCTTCACTGGTAAAAGGAACACTGCCCCAGGAAAGGGTCA  
 CGAAGCTTGCGCCGCTGCCAGTCAGAGGAAGATTTGCTGCTTGTTCGAAGCATCAATGAAACTGTA  
**CTAA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** SgfI-MluI
- ACCN:** NM\_001025423
- Insert Size:** 1404 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- 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:	<u>NM_001025423.1, NP_001020594.1</u>
RefSeq Size:	1884 bp
RefSeq ORF:	1404 bp
Locus ID:	362474
UniProt ID:	<u>Q4QQW3</u>
Cytogenetics:	5q11
Gene Summary:	Catalyzes the cofactor-independent reversible oxidation of gamma-hydroxybutyrate (GHB) to succinic semialdehyde (SSA) coupled to reduction of 2-ketoglutarate (2-KG) to D-2-hydroxyglutarate (D-2-HG). L-3-hydroxybutyrate (L-3-OHB) is also a substrate for HOT when using 2-KG as hydrogen acceptor, resulting in the formation of D-2-HG (By similarity). [UniProtKB/Swiss-Prot Function]