

## Product datasheet for MR222327

### Adh5 (NM\_007410) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Adh5 (NM_007410) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Adh5
Synonyms:	Adh-5; Adh3; GSNOR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR222327 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCGAACCCAGGTGATCAGGTGTAAGGCTGCAGTCGCCTGGGAGGCGGGAAAGCCTCTCTCCATAGAGG  
AGATAGAAGTGGCCCTCCAAAGGCTCATGAAGTTCGGATTAAGATCCTTGCCACTGCTGTTTGCCACAC  
CGATGCCTATACCCTGAGCGGAGCTGACCCCGAGGGGTGTTTCCAGTGATCTTGGGACATGAAGGTGCT  
GGAATTGTGAAAGTGTGGTGAAGGGTACGAAAGCTGAAGGCAGGTGACTGTATCCCACTCTACA  
TCCCACAGTGTGGAGAATGCAAGTTTTGTCTGAATCCTAAAACAACCTTGCCAGAAAATAAGGGTCAC  
TCAGGGGAAGGGATTAATGCCAGATGGGACTAGCAGATTTACCTGCAAAGGAAAGTCTGTTTTCTACTTC  
ATGGGGACTAGCACATTTCCGAGTACACAGTTGTGGCTGACATCTCTGTTGCTAAAATCGATCCTTCGG  
CCCCTTTGGATAAAGTCTGCCTTCTCGGCTGTGGTATTTCAACTGGCTACGGGGCTGCTGTGAACACTGC  
CAAGGTGGAGCCTGGTTCTACTTGTGCCGTCTTTGGCCTGGGAGGAGTTGGACTGGCAGTGATCATGGGC  
TGTAAGGTGGCTGGTGCATCCCGGATCATTGGTATCGACATCAATAAAGATAAATTCGAAAAGGCCAAAG  
AATTTGGAGCCTCTGAATGTATTAGCCCCAAGACTTCAGTAAATCCATCCAGGAAGTCTCGTTGAGAT  
GACAGATGGGGCGTGGATTACTCCTTTGAGTGCATTGGCAACGTGAAGGTGATGAGATCAGCCCTTGAG  
GCAGCCCAAAAGGCTGGGTGTCAGTGTGGTGTGGAGTGTGCTTTCAGGGGAAGAAATCTCCACTC  
GTCCATTCAGCTGGTGACAGGACGCACATGGAAAGGCACCGCCTTTGGAGGATGGAAGAGTGTGGAGAG  
TGTCCCAAAGCTGGTGTGAATATATGTCCAAAAGATAAAAAGTTGACGAATTTGTGACCGCAATCTC  
TCCTTCGACCAAATTAACCAAGCCTTTGATCTGATGCACTCGGGAGACAGCATTGCAACTGTTCTAAAGA  
TG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >MR222327 protein sequence  
 Red=Cloning site Green=Tags(s)

MANQVIRCKAAVAWEAGKPLSIEEIEVAPPKAHEVRILATAVCHTDAYTL SGADPEGCFPVILGHEGA  
 GIVESVGEVTKLKAGDVIPL YIPQCGECKFLNPKTNLCQKIRVTQGKGLMPDGT SRFTCKGKSVFHF  
 MGTSTFSEYTVVADISVAKIDPSAPLDKVCLLGGCISTGYGAAVNTAKVEPGSTCAVFLGGVGLAVIMG  
 CKVAGASRIIGIDINKDKFAKAKEFGASECISPQDFSKSIQEVL VEMTDGGVDYDFECIGNVKVMRSAL  
 AAHKGWGVSVVVGVAASGEEISTRPFQLVTGRTWKGTAFGGWKSVESVPKLVSEYMSKKIKYDEFVTGNL  
 SFDQINQAFDLMHSGDSIRTVLKM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_007410

**ORF Size:** 1125 bp

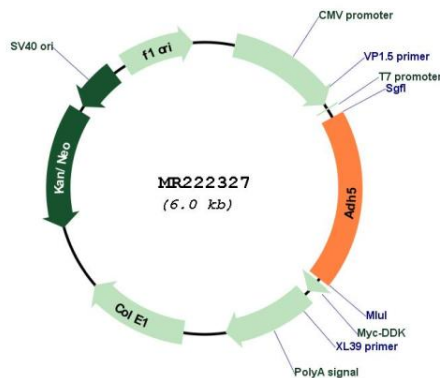
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of 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](mailto: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.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u>NM_007410.3</u>
<b>RefSeq Size:</b>	1604 bp
<b>RefSeq ORF:</b>	1125 bp
<b>Locus ID:</b>	11532
<b>UniProt ID:</b>	<u>P28474</u>
<b>Cytogenetics:</b>	3 G3
<b>MW:</b>	39.5 kDa
<b>Gene Summary:</b>	Class-III ADH is remarkably ineffective in oxidizing ethanol, but it readily catalyzes the oxidation of long-chain primary alcohols and the oxidation of S-(hydroxymethyl) glutathione. [UniProtKB/Swiss-Prot Function]

### Product images:



Circular map for MR222327