

Product datasheet for **RC209656**

ALDH1A3 (NM_000693) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ALDH1A3 (NM_000693) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ALDH1A3
Synonyms:	ALDH1A6; ALDH6; MCOP8; RALDH3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC209656 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCCACCGCTAACGGGGCCGTGGAAAACGGGCAGCCGGACAGGAAGCCGCCGGCCCTGCCGCGCCCA
 TCCGCAACCTGGAGGTCAAGTTCACCAAGATATTTATCAACAATGAATGGCACGAATCCAAGAGTGGGAA
 AAAGTTTGCTACATGTAACCTTCAACTCGGGAGCAAATATGTGAAGTGAAGAAGGAGATAAGCCCGAC
 GTGGACAAGGCTGTGGAGGCTGCACAGTTGCCTTCCAGAGGGGCTCGCCATGGCGCCGGCTGGATGCC
 TGAGTCGTGGGCGGCTGCTGCACCAGCTGGCTGACCTGGTGGAGAGGGACCGGCCACCTTGGCCGCCCT
 GGAGACGATGGATACAGGAAGCCATTTCTTCATGCTTTTTTCATCGACCTGGAGGGCTGTATTAGAACC
 CTCAGATACTTTGCAGGGTGGCAGACAAAATCCAGGGCAAGACCATCCCACAGATGACAACGTCGTGT
 GCTTACCAGGCATGAGCCATTGGTGTCTGTGGGCCATCACTCCATGGAACCTCCCCCTGCTGATGCT
 GGTGTGGAAGCTGGCACCCGCCCTCTGCTGTGGGAACACCATGGTCTGAAGCCTGCGGAGCAGACACCT
 CTACCGCCCTTATCTCGGCTCTCTGATCAAAGAGGCCGGTTCCTCCAGGAGTGGTGAACATTTGTGC
 CAGGATTCCGGGCCACAGTGGGAGCAGCAATTTCTTCTCACCCCTCAGATCAACAAGATCGCCTTACCGG
 CTCCACAGAGGTTGAAAACCTGGTTAAAGAAGCTGCGTCCCGGAGCAATCTGAAGCGGTGACGCTGGAG
 CTGGGGGGGAAGAACCCCTGCATCGTGTGTGCGGACGCTGACTTGGACTTGGCAGTGGAGTGTGCCCATC
 AGGGAGTGTCTTCAACCAAGGCCAGTGTTCACGGCAGCCTCCAGGGTGTTCGTGGAGGAGCAGGTCTA
 CTCTGAGTTTGTAGGGGAGCGTGGAGTATGCCAAGAAACGGCCCGTGGGAGACCCCTTCGATGTCAA
 ACAGAACAGGGCCCTCAGATTGATCAAAAGCAGTTCGACAAAATCTTAGAGCTGATCGAGAGTGGGAAGA
 AGGAAGGGGCCAAGCTGGAATGCGGGGGCTCAGCCATGGAAGACAAGGGGCTCTTCATCAAACCCACTGT
 CTCTCAGAAGTACAGACAACATGCGGATTGCCAAGAGGAGATTTTCGGGCCATGCAACCAATACTG
 AAGTTCAAAAGTATCGAAGAAGTGATAAAAAGAGCGAATAGCACCGACTATGGACTCACAGCAGCCGTGT
 TCACAAAAATCTCGACAAAGCCCTGAAGTTGGCTTCTGCCTTAGAGTCTGGAACGGTCTGGATCAACTG
 CTACAACGCCCTCTATGCACAGGCTCCATTTGGTGGCTTAAATGTCAGGAAATGGCAGAGAAGTGGT
 GAATACGCTTTGGCCGAATACACAGAAGTAAAACCTGTCACCATCAAACCTGGCGACAAGAACCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC209656 protein sequence
 Red=Cloning site Green=Tags(s)

MATANGAVENQPDPRKPPALPRPIRNLEVKFTKIFINNEWHESKSGKKFATCNPSTREQICEVEEGDKPD
 VDKAVEAAQVAFQRGSPWRRDLALSRGRLLHQLADLVERDRATLAALETMDTGKPFLLHAFFIDLEGCIRT
 LRYFAGWADKIQKTIPTDDNVVCFTRHEPIGVCGAITPWNFPLMLVWKLAPALCCGNTMVLKPAEQTP
 LTALYLGSLIKEAGFPVGVNIVPGFGPTVGAIISSHPQINKIAFTGSTEVGKLVKEAASRNLKRVTL
 LGGKNPCIVCADADLDLAVECAHQGVFFNQGCCTAASRVFVEEQVYSEFVRRSVEYAKKRPVGPDPFDK
 TEQGPQIDQKQFDKILELIESGKKEGAKLECGGSAMEDKGLFIKPTVFSEVTDNMRIAKEEIFGPVQPIL
 KFKSIEEVIKRNSTDYGLTAAVFTKNLDKALKLASALESQVWVINCYNALYAQAPFGGFKMSGNGREL
 EYALAEYTEVKTVTIKLGDKNP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Domains: aldedh

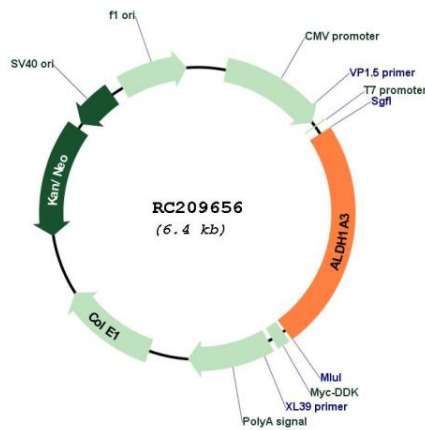
Protein Families: Druggable Genome

Protein Pathways: Drug metabolism - cytochrome P450, Glycolysis / Gluconeogenesis, Histidine metabolism, Metabolic pathways, Metabolism of xenobiotics by cytochrome P450, Phenylalanine metabolism, Tyrosine metabolism

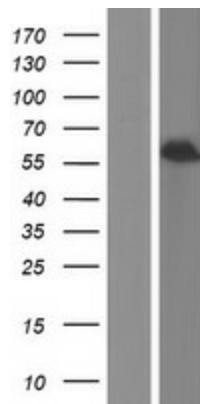
MW: 56.1 kDa

Gene Summary: This gene encodes an aldehyde dehydrogenase enzyme that uses retinal as a substrate. Mutations in this gene have been associated with microphthalmia, isolated 8, and expression changes have also been detected in tumor cells. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jun 2014]

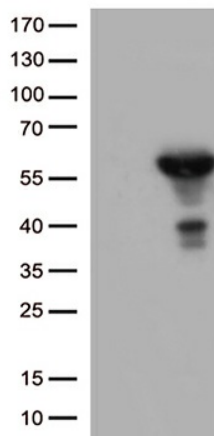
Product images:



Circular map for RC209656



Western blot validation of overexpression lysate (Cat# [LY400233]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209656 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ALDH1A3 (Cat# RC209656, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ALDH1A3 (Cat# [TA502841])(1:500).