

Product datasheet for RC232482

AKR1A1 (NM_001202413) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AKR1A1 (NM_001202413) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	AKR1A1
Synonyms:	ALDR1; ALR; ARM; DD3; HEL-S-6
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC232482 representing NM_001202413 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGCGGCTTCTGTGTTCTACTGCACACTGGGCAGAAGATGCCTCTGATTGGTCTGGGTACCTGGAAGA
 GTGAGCCTGGTCAGGTAAGAGCAGCTGTTAAGTATGCCCTTAGCGTAGGCTACCGCCACATTGATTGTGC
 TGCTATCTACGGCAATGAGCCTGAGATTGGGGAGGCCCTGAAGGAGGACGTGGGACCAGGCAAGGCGGTG
 CCTCGGGAGGAGCTGTTGTGACATCCAAGCTGTGGAACACCAAGCACCACCCGAGGATGTGGAGCCTG
 CCCTCCGAAGACTCTGGCTGACCTCCAGCTGGAGTATCTGGACCTGTACCTGATGCACTGGCCTTATGC
 CTTTGAGCGGGGAGACAACCCCTTCCCAAGAATGCTGATGGGACTATATGCTACGACTCCACCCACTAC
 AAGGAGACTTGAAGGCTCTGGAGGCACTGGTGGCTAAGGGGCTGGTGCAGGCGCTGGGCCCTGTCCAAT
 TCAACAGTCGGCAGATTGATGACATACTCAGTGTGGCCTCCGTGCGTCCAGCTGTCTTGCAGGTGGAGTG
 CCACCCATACTTGGCTCAAAATGAGCTAATTGCCCACTGCCAAGCACGTGGCCTGGAGGTAAGTCTTAT
 AGCCCTTTGGGCTCCTCTGATCGTGCATGGCGTGATCCTGATGAGCCTGTCTGCTGGAGGAACAGTAG
 TCCTGGCATTGGCTGAAAAGTATGGCCGATCTCCAGCTCAGATCTTGCTCAGGTGGCAGGTCCAGCGGAA
 AGTGATCTGCATCCCCAAAGTATCACTCCTTCTCGAATCCTTCAGAACATCAAGGTGTTTGACTTCACC
 TTAGCCCAAGAGATGAAGCAGCTAAATGCCCTGAACAAAATTGGAGATATATTGTGCCTATGCTTA
 CGGTGGATGGGAAGAGAGTCCCAAGGGATGCAGGGCATCCTCTGTACCCCTTTAATGACCCGTAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA


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Protein Sequence: >RC232482 representing NM_001202413
 Red=Cloning site Green=Tags(s)

MAASCVLLHTGQKMPLIGLGTWKSEPGQVKAASKYALSVGYRHIDCAAIYGNPEIGEALKEDVGPVKAV
 PREELFVTSKLWNTKHPEDVEPALRKTADLQLEYLDLYLMHWPYAIFERGNPFKNADGTICYDSTHY
 KETWKALEALVAKGLVQALGLSNFNSRQIDDILSVASVRPAVLQVECHPYLAQNELIAHCQARGLEVTA
 YSPLGSSDRAWRPDEPVLLLEPVVLALEKYGRSPAQILLRWQVQRKVICIPKSITPSRILQNIKVFDF
 TFSPEEMKQLNALNKNWRYIVPMLTVDGKRVPRDAGHPLYPFNDPY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6414_h09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001202413

ORF Size: 975 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_001202413.1](#), [NP_001189342.1](#)

RefSeq Size: 1380 bp

RefSeq ORF: 978 bp

Locus ID: 10327

UniProt ID: [P14550](#)

Cytogenetics: 1p34.1

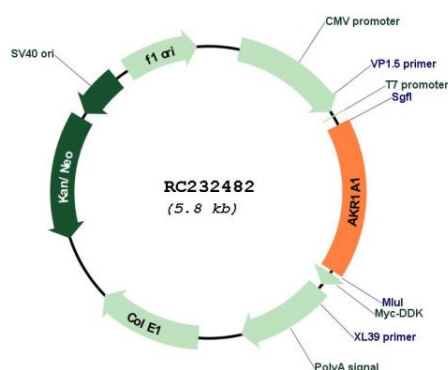
Protein Families: Druggable Genome

Protein Pathways: Glycerolipid metabolism, Glycolysis / Gluconeogenesis, Metabolic pathways

MW: 36.6 kDa

Gene Summary: This gene encodes a member of the aldo/keto reductase superfamily, which consists of more than 40 known enzymes and proteins. This member, also known as aldehyde reductase, is involved in the reduction of biogenic and xenobiotic aldehydes and is present in virtually every tissue. Multiple alternatively spliced transcript variants of this gene exist, all encoding the same protein. [provided by RefSeq, Jan 2011]

Product images:



Circular map for RC232482