

Product datasheet for **SC308234**

AKR1C2 (NM_205845) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AKR1C2 (NM_205845) Human Untagged Clone
Tag:	Tag Free
Symbol:	AKR1C2
Synonyms:	AKR1C-pseudo; BABP; DD; DD-2; DD/BABP; DD2; DDH2; HAKRD; HBAB; MCDR2; SRXY8; TDD
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC119276 sequence for NM_001353 edited (data generated by NextGen Sequencing)

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ATGGATTGAAATACCAAGTGTGAAGCTGAATGATGGTCACTTCATGCCTGTCCTGGGA
TTTGGCACCTATGCGCCTGCAGAGGTTCCATAAAAGTAAAGCTCTAGAGGCCNCAAAATTG
GCAATTGAANNNNNNNNNNNCATATTGATTCTGCACATNNNTACAATAATGAGGAGCAG
GTTGGACTGGCCATCCGAAGCAAGATTGCAGATGGCAGTGTGAAGAGAGAAGACATATTC
TACACTTCAAAGCTTTGGAGCAATCCCATCGACCAGAGTTGGTCCGACCAGCCTTGAA
AGGTCAGTAAAAATCTCAATTGGACTATGTTGACCTCTATCTTATTCTTTCCAGTG
TCTGTAAAGCCAGGTGAGGAAGTATCCCAAAAGATGAAAATGGAAAAACTATTTGAC
ACAGTGGATCTCTGTGCCACATGGGAGGCCATGGAGAAGTGTAAAGATGCAGGATTGGCC
AAGTCCATCGGGGTGTCCAACCTCAACCACAGGCTGCTGGAGATGATCCTCAACAAGCCA
GGGCTCAAGTACAAGCCTGTCTGCAACCAGGTGGAATGTATCCTTACTTCAACCAGAGA
AAACTGCTGGATTTCTGCAAGTCAAAGACATTGTTCTGTTGCCTATAGTGTCTCTGGGA
TCCCATCGAGAAGAACCATGGGTGGACCCGAACTCCCCGGTGTCTTGGAGGACCCAGTC
CTTTGTGCCTTGGCAAAAAGCACAAGCGAACCCAGCCCTGATTGCCCTGCGCTACCAG
CTGCAGCGTGGGGTTGTGGTCTGGCCAAGAGCTACAATGAGCAGCGCATCAGACAGAAC
GTGCAGGTGTTTGAATCCAGTTGACTTCAGAGGAGATGAAAGCCATAGATGGCCTAAAC
AGAAATGTGCGATATTTGACCCTTGATATTTTTGCTGGCCCCCTAATTATCCATTTTCT
GATGAATATTAA
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Clone variation with respect to NM_001353.5

15 t=>c;103 t=>c;112 a=>n;113 c=>n;130 g=>n;131 c=>n;132 t=>n;133 g=>n;134 g=>n;135
c=>n;136 t=>n;137 t=>n;138 c=>n;139 c=>n;140 g=>n;141 c=>n;156 t=>a;160 t=>n;161
t=>n;162 a=>n;259 t=>a;327 t=>c;342 c=>t;451 g=>a;509 g=>a;515 a=>t;666 c=>t;783 a=>g

Restriction Sites: Please inquire



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ACCN:	NM_205845
Insert Size:	1800 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).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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:	<ol style="list-style-type: none"> 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_205845.1</u> , <u>NP_995317.1</u>
RefSeq Size:	1563 bp
RefSeq ORF:	972 bp
Locus ID:	1646
UniProt ID:	<u>P52895</u>
Cytogenetics:	10p15.1
Protein Families:	Druggable Genome
Protein Pathways:	Metabolism of xenobiotics by cytochrome P450
Gene Summary:	<p>This gene encodes a member of the aldo/keto reductase superfamily, which consists of more than 40 known enzymes and proteins. These enzymes catalyze the conversion of aldehydes and ketones to their corresponding alcohols using NADH and/or NADPH as cofactors. The enzymes display overlapping but distinct substrate specificity. This enzyme binds bile acid with high affinity, and shows minimal 3-alpha-hydroxysteroid dehydrogenase activity. This gene shares high sequence identity with three other gene members and is clustered with those three genes at chromosome 10p15-p14. Three transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq, Dec 2011]</p> <p>Transcript Variant: This variant (2) differs in the 5' UTR compared to variant 1. Variants 1 and 2 encode the same isoform (1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>

