

Product datasheet for SC128267

AKR1C2 (NM 001354) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: AKR1C2 (NM 001354) Human Untagged Clone

Tag: Tag Free AKR1C2 Symbol:

Synonyms: AKR1C-pseudo; BABP; DD; DD-2; DD/BABP; DD2; DDH2; HAKRD; HBAB; MCDR2; SRXY8; TDD

Vector: pCMV6-XL5

E. coli Selection: Ampicillin (100 ug/mL)

Cell Selection: None

>NCBI ORF sequence for NM_001354, the custom clone sequence may differ by one or more **Fully Sequenced ORF:**

nucleotides

ATGGATTCGAAATACCAGTGTGGAAGCTGAATGATGGTCACTTCATGCCTGTCCTGGGATTTGGCACCT ATGCGCCTGCAGAGGTTCCTAAAAGTAAAGCTCTAGAGGCCGTCAAATTGGCAATAGAAGCCGGGTTCCA CCATATTGATTCTGCACATGTTTACAATAATGAGGAGCAGGTTGGACTGGCCATCCGAAGCAAGATTGCA GATGGCAGTGTGAAGAGAGAGACATATTCTACACTTCAAAGCTTTGGAGCAATTCCCATCGACCAGAGT TGGTCCGACCAGCCTTGGAAAGGTCACTGAAAAATCTTCAATTGGACTATGTTGACCTCTATCTTATTCA TTTTCCAGTGTCTGTAAAGCCAGGTGAGGAAGTGATCCCAAAAGATGAAAATGGAAAAATACTATTTGAC ACAGTGGATCTCTGTGCCACATGGGAGGCCATGGAGAAGTGTAAAGATGCAGGATTGGCCAAGTCCATCG GGGTGTCCAACTTCAACCACAGGCTGCTGGAGATGATCCTCAACAAGCCAGGGCTCAAGTACAAGCCTGT CTGCAACCAGGTGGAATGTCATCCTTACTTCAACCAGAGAAAACTGCTGGATTTCTGCAAGTCAAAAGAC ATTGTTCTGGTTGCCTATAGTGCTCTGGGATCCCATCGAGAAGAACCATGGGTGGACCCGAACTCCCCGG TGCTCTTGGAGGACCCAGTCCTTTGTGCCTTGGCAAAAAAGCACAAGCGAACCCCAGCCCTGATTGCCCT GTGCAGGTGTTTGAATTCCAGTTGACTTCAGAGGAGATGAAAGCCATAGATGGCCTAAACAGAAATGTGC GATATTTGACCCTTGATATTTTTGCTGGCCCCCCTAATTATCCATTTTCTGATGAATATTAA

Restriction Sites: Notl-Notl ACCN: NM_001354 1500 bp Insert Size:



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AKR1C2 (NM_001354) Human Untagged Clone - SC128267

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: 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 001354.4, NP 001345.1</u>

10p15.1

 RefSeq Size:
 1663 bp

 RefSeq ORF:
 972 bp

 Locus ID:
 1646

 UniProt ID:
 P52895

Cytogenetics:

Domains: aldo_ket_red

Protein Families: Druggable Genome

Protein Pathways: Metabolism of xenobiotics by cytochrome P450

Gene Summary: 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]

Transcript Variant: This variant (1) 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.