

Product datasheet for SC330317

AKR1C3 (NM 001253909) Human Untagged Clone

Product data:

Product Type: Expression Plasmids

Product Name: AKR1C3 (NM_001253909) Human Untagged Clone

Tag: Tag Free Symbol: AKR1C3

Synonyms: DD3; DDX; HA1753; HAKRB; HAKRe; hluPGFS; HSD17B5; PGFS

Vector: pCMV6-Entry (PS100001)

Fully Sequenced ORF: >SC330317 representing NM_001253909.

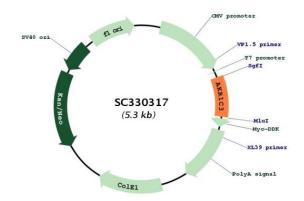
Blue=Insert sequence Red=Cloning site Green=Tag(s)

ATGGATTCCAAACACCAGTGTGTAAAGCTAAATGATGGCCACTTCATGCCTGTATTGGGATTTGGCACC TATGCACCTCCAGAGGTTCCGAGAAGTAAAGCTTTGGAGGTCACAAAATTAGCAATAGAAGCTGGGTTC CGCCATATAGATTCTGCTCATTTATACAATAATGAGGAGCAGGTTGGACTGGCCATCCGAAGCAAGATT GCAGATGGCAGTGGAAGAGAGAAGACATATTCTACACTTCAAAGCTTTGGTCCACTTTTCATCGACCA GAGTTGGTCCGACCAGCCTTGGAAAAACTCACTGAAGAAAAGCTCAATTGGACTATGTTGACCTCTATCTT ATTCATTCTCCAATGTCTCTAAAGGTATGCAGTTTGTATGAGCATAAAATTGCGCTTCTGCTGTCATTA

TAA

Restriction Sites: Sgfl-Mlul

Plasmid Map:





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AKR1C3 (NM_001253909) Human Untagged Clone - SC330317

ACCN: NM_001253909

Insert Size: 417 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).

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 001253909.1</u>

RefSeq Size: 1064 bp
RefSeq ORF: 417 bp
Locus ID: 8644
Cytogenetics: 10p15.1

Protein Families: Druggable Genome

Protein Pathways: Arachidonic acid metabolism, Metabolism of xenobiotics by cytochrome P450

MW: 15.7 kDa

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 by utilizing NADH and/or NADPH as cofactors. The enzymes display overlapping but distinct substrate specificity. This enzyme catalyzes the reduction of prostaglandin (PG) D2, PGH2 and phenanthrenequinone (PQ), and the oxidation of 9alpha,11beta-PGF2 to PGD2. It may play an important role in the pathogenesis of allergic

diseases such as asthma, and may also have a role in controlling cell growth and/or

differentiation. 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 different isoforms have been found for this gene. [provided by RefSeq, Dec 2011] Transcript Variant: This variant (3) lacks several exons at its 3' end, which extends into an intron compared to variant 1. The resulting isoform (3) has a shorter and distinct C-terminus

compared to isoform 1.