

## Product datasheet for **SC321532**

### AKR1C3 (NM\_003739) Human Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** AKR1C3 (NM\_003739) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** AKR1C3  
**Synonyms:** DD3; DDX; HA1753; HAKRB; HAKRe; hluPGFS; HSD17B5; PGFS  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC (PS100020)  
**E. coli Selection:** Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for NM\_003739.4  
 GTAATCTCTGAGGAGAAGCAGCAGCAAACATTTGCTAGTCAGACAAGTGACAGGGAAATGG  
 ATCCAAACACCAAGTGTGTAAGCTAAATGATGGCCACTTCATGCCTGTATTGGGATTTG  
 GCACCTATGCACCTCCAGAGGTTCCAAGAAGTAAAGCTTTGGAGGTCACAAAATTAGCAA  
 TAGAAGCTGGGTTCCGCCATATAGATTCTGCTCATTTTATAACAATAATGAGGAGCAGGTTG  
 GACTGGCCATCCGAAGCAAGATTGCAGATGGCAGTGTGAAGAGAGAAGACATATTCTACA  
 CTTCAAAGCTTTGGTCCACTTTTCATCGACCAGAGTTGGTCCGACCAGCCTTGAAAACT  
 CACTGAAAAAGCTCAATTGGACTATGTTGACCTCTATCTTATTCATTCTCCAATGTCTC  
 TAAAGCCAGGTGAGGAACCTTCCACCAACAGATGAAAATGGAAAAGTAATATTTGACATAG  
 TGGATCTCTGTACCACCTGGGAGGCCATGGAGAAGTGAAGGATGCAGGATTGGCCAAGT  
 CCATTGGGGTGTCAAACCTCAACCGCAGGCAGCTGGAGATGATCCTCAACAAGCCAGGAC  
 TTAAGTACAAGCCTGTCTGCAACCAGGTAGAATGTCATCCGTATTTCAACCGGAGTAAAT  
 TGCTAGATTTCTGCAAGTCGAAAGATATTGTTCTGGTTGCCTATAGTGCTCTGGGATCTC  
 AACGAGACAAACGATGGGTGGACCCGAACCTCCCCGGTGTCTTTGGAGGACCCAGTCCTTT  
 GTGCCCTTGGCAAAAAAGCACAAGCGAACCCAGCCCTGATTGCCCTGCGTACCAGCTGC  
 AGCGTGGGGTTGTGGTCTGGCCAAGAGCTACAATGAGCAGCGCATCAGACAGAACGTGC  
 AGGTTTTTGAGTTCCAGTTGACTGCAGAGGACATGAAAGCCATAGATGGCCTAGACAGAA  
 ATCTCCACTATTTAACAGTGATAGTTTTGCTAGCCACCCTAATTATCCATATTCAGATG  
 AATATTAACATGGAGAGCTTTGCCTGATGTCTACCAGAAGCCCTGTGTGGATGGTGAC  
 GCAGAGGACGTCTCTATGCCGGTGACTGGACATACACCTCTACTTAAATCCGTCCTGTT  
 TAGCGACTTCAGTCAACTACAGCTGAGTCCATAGCCCAGAAAGACAATAAATTTTATCA  
 TTTTGAATAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

**Restriction Sites:** Please inquire  
**ACCN:** NM\_003739



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<b>OTI Disclaimer:</b>	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).
<b>OTI Annotation:</b>	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.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_003739.4</a> , <a href="#">NP_003730.4</a>
<b>RefSeq Size:</b>	1224 bp
<b>RefSeq ORF:</b>	972 bp
<b>Locus ID:</b>	8644
<b>UniProt ID:</b>	<a href="#">P42330</a>
<b>Cytogenetics:</b>	10p15.1
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Arachidonic acid metabolism, Metabolism of xenobiotics by cytochrome P450
<b>Gene Summary:</b>	<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 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]</p> <p>Transcript Variant: This variant (1) represents the longest transcript and encodes one of the larger isoforms (1).</p>