

## Product datasheet for **SC320670**

### AKR1B1 (NM\_001628) Human Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** AKR1B1 (NM\_001628) Human Untagged Clone  
**Tag:** Tag Free  
**Symbol:** AKR1B1  
**Synonyms:** ADR; ALDR1; ALR2; AR  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC (PS100020)  
**E. coli Selection:** Ampicillin (100 ug/mL)

**Fully Sequenced ORF:** >OriGene sequence for NM\_001628.2  
ACGGGCTATTTAAAGGTACGCGCCGCGCAAGGCCGACCGTACTGGGCGGGGCTCTGG  
GGAGCGCAGCAGCCATGGCAAGCCGTCTCCTGCTCAACAACGGCGCAAGATGCCATCC  
TGGGGTTGGGTACCTGGAAGTCCCTCCAGGGCAGGTGACTGAGGCCGTGAAGGTGGCCA  
TTGACGTGCGGTACCGCCACATCGACTGTGCCATGTGTACCAGAATGAGAATGAGGTGG  
GGGTGGCCATTACAGGAGAAGCTCAGGGAGCAGGTGGTGAAGCGTGAGGAGCTTTCATCG  
TCAGCAAGCTGTGGTGCACGTACCATGAGAAGGGCCTGGTGAAGGAGCCTGCCAGAAGA  
CACTCAGCGACCTGAAGCTGGACTACCTGGACCTCTACCTTATTCACTGGCCGACTGGCT  
TTAAGCCTGGGAAGGAATTTTTCCATTGGATGAGTCGGGCAATGTGGTCCCAGTGACA  
CCAACATTCTGGACACGTGGCGGCCATGGAAGAGCTGGTGGATGAAGGGCTGGTGAAG  
CTATTGGCATCTCCAACCTCAACCATCTCCAGGTGGAGATGATCTTAAACAAACCTGGCT  
TGAAGTATAAGCCTGCAGTTAACAGATTGAGTGCCACCCATATCTCACTCAGGAGAAGT  
TAATCCAGTACTGCCAGTCCAAAGGCATCGTGGTGACCGCTACAGCCCCCTCGGCTCTC  
CTGACAGGCCCTGGGCAAGCCCAGGACCCCTTCTCCTGGAGGATCCCAGGATCAAGG  
CGATCGCAGCCAAGCACAATAAACTACAGCCCAGGTCTGATCCGGTCCCCATGCAGA  
GGAACCTGGTGGTGTATCCCCAAGTCTGTGACACCAGAACGCATTGCTGAGAACTTAAAG  
TCTTTGACTTTGAACTGAGCAGCCAGGATATGACCACCTTACTCAGCTACAACAGGAACT  
GGAGGGTCTGTGCCTTGTGAGCTGTACCTCCCACAAGGATTACCCTTCCATGAAGAGT  
TTTGAAGCTGTGGTTGCCTGCTCGTCCCAAGTGACCTATACCTGTGTTTCTTGCCTCAT  
TTTTTTCCTTGCAAATGTAGTATGGCCTGTGCTACTCAGCAGTGGGACAGCAACCTGTAG  
AGTGGCCAGCGAGGGCGTGTCTAGCTTGTGTTGGATCTCAAGAGCCCTGTCAGTAGAGT  
AGAAGTCTCTCCAGTTTGTCTTGCCTTCTTTCTACCCTGCTGGGAAAGTACAACCTG  
AATACCCCTTTCTGACCAAAGAGAAGCAAAATCTACCAGGTCAAATAGTGCCACTAACG  
GTTGAGTTTTGACTGCTTGGAACTGGAATCCTTTCAGCAAGACTTCTCTTGCCTCAAAT  
AAAAAGTGCTTTTGTGAGAAAAAAAAAAAAAAAAAAAA

**Restriction Sites:** Please inquire



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<b>ACCN:</b>	NM_001628
<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>	<u><a href="#">NM_001628.2</a></u> , <u><a href="#">NP_001619.1</a></u>
<b>RefSeq Size:</b>	1416 bp
<b>RefSeq ORF:</b>	951 bp
<b>Locus ID:</b>	231
<b>UniProt ID:</b>	<u><a href="#">P15121</a></u>
<b>Cytogenetics:</b>	7q33
<b>Domains:</b>	aldo_ket_red
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Fructose and mannose metabolism, Galactose metabolism, Glycerolipid metabolism, Metabolic pathways, Pentose and glucuronate interconversions, Pyruvate metabolism
<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. This member catalyzes the reduction of a number of aldehydes, including the aldehyde form of glucose, and is thereby implicated in the development of diabetic complications by catalyzing the reduction of glucose to sorbitol. Multiple pseudogenes have been identified for this gene. The nomenclature system used by the HUGO Gene Nomenclature Committee to define human aldo-keto reductase family members is known to differ from that used by the Mouse Genome Informatics database. [provided by RefSeq, Feb 2009]</p> <p>Transcript Variant: This variant (1) encodes isoform 1.</p>