

## Product datasheet for **RC231126**

### **AKR1D1 (NM\_001190906) Human Tagged ORF Clone**

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** AKR1D1 (NM\_001190906) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** AKR1D1  
**Synonyms:** 3o5bred; CBAS2; SRD5B1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC231126 representing NM\_001190906  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGATCTCAGTGCTGCAAGTCACCGCATACCTCTAAGTGATGGAACAGCATTCCCATCATCGGACTTG  
GTACCTACTCAGAACCTAAATCGACCCCTAAGGGAGCCTGTGCAACATCGGTGAAGGTTGCTATTGACAC  
AGGGTACCGACATATTGATGGGGCTACATCTACCAAAATGAACACGAAGTTGGGGAGGCCATCAGGGAG  
AAGATAGCAGAAGGAAAGGTGCGGAGGGAAGATATCTTCTACTGTGAAAGCTATGGGCTACAAATCATG  
TCCCAGAGATGGTCCGCCAACCTGGAGAGGACTCAGGGTCTCCAGCTAGATTATGTGGATCTTTA  
CATCATTGAAGTACCCATGGCCTTTAAGCCAGGAGATGAAATATACCCTAGAGATGAGAATGGCAAATGG  
TTATATCACAAGTCAAATCTGTGTGCCACTTGGGAGGTTGAGTGCCATCCGTATTTACCCAGCCAAAAC  
TCTTGAATTTTGCCAACAACATGACATTGTCATTACTGCATATAGCCCTTTGGGGACCAGTAGGAATCC  
AATCTGGGTGAATGTTTCTTCCACCTTTGTTAAAGGATGCACTTCTAAACTATTGGGAAAAGGTAC  
AATAAGACAGCAGCTCAAATGTTTTGCGTTTCAACATCCAGCGAGGGGTGGTTGTCATTCTAAAAGCT  
TTAATCTTGAAGGATCAAAGAAAATTTTCAGATCTTTGACTTTTCTCTCACTGAAGAAGAAATGAAGGA  
CATTGAAGCCTTGAATAAAAATGTCCGCTTTGTAGAATTGCTCATGTGGCGGATCATCTGAATACCCA  
TTTCATGATGAATAC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC231126 representing NM\_001190906  
Red=Cloning site Green=Tags(s)

MDLSAASHRIPLSDGNSIPIIIGLTYSEPKSTPKGACATSVKVAIDTGYRHIDGAYIYQNEHEVGEAIRE  
 KIAEGKVRREDIFYCGKLWATNHVPEMVRPTLERTLRVLQLDYVDLYIIEVPMFAFKPGDEIYPRDENGKW  
 LYHKSNLKATWEVECHPYFTQPKLLKFCQQHDIVITAYSPLGTSRNPFIWNVSSPPLLKDALNLSLGKRY  
 NKTAAQIVLRFNIQRGVVIVPKSFNLERIKENFQIFDFSLTEEMKDIEALNKNVRFVELLMWRDHPEYF  
 FHDEY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

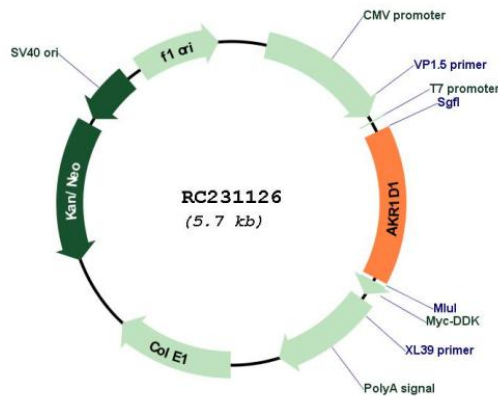
**Chromatograms:** [https://cdn.origene.com/chromatograms/mk8049\\_d01.zip](https://cdn.origene.com/chromatograms/mk8049_d01.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

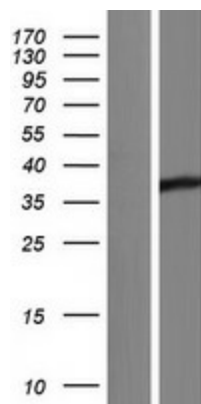


**Plasmid Map:**



**ACCN:** NM\_001190906

<b>ORF Size:</b>	855 bp
<b>OTI Disclaimer:</b>	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<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_001190906.2</a>
<b>RefSeq ORF:</b>	858 bp
<b>Locus ID:</b>	6718
<b>UniProt ID:</b>	<a href="#">P51857</a>
<b>Cytogenetics:</b>	7q33
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Androgen and estrogen metabolism, C21-Steroid hormone metabolism, Metabolic pathways, Primary bile acid biosynthesis
<b>MW:</b>	33.3 kDa
<b>Gene Summary:</b>	The enzyme encoded by this gene is responsible for the catalysis of the 5-beta-reduction of bile acid intermediates and steroid hormones carrying a delta(4)-3-one structure. Deficiency of this enzyme may contribute to hepatic dysfunction. Three transcript variants encoding different isoforms have been found for this gene. Other variants may be present, but their full-length natures have not been determined yet. [provided by RefSeq, Jul 2010]

**Product images:**

Western blot validation of overexpression lysate (Cat# [LY434125]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC231126 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).