

Product datasheet for RC200504

AKR1B1 (NM_001628) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	AKR1B1 (NM_001628) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	AKR1B1
Synonyms:	ADR; ALDR1; ALR2; AR
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC200504 representing NM_001628 Red=Cloning site Blue=ORF Green=Tags(s)

CTATAGGGCGCCCGGAATTCGTGCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCGGCGC
GCC

ATGGCAAGCCGCTCCTGCTCAACAACGGCGCCAAGATGCCCATCTGGGGTTGGGTACCTGGAAGTCCC
CTCCAGGGCAGGTGACTGAGGCCGTGAAGGTGGCCATTGACGTCGGGTACCGCCACATCGACTGTGCCCA
TGTGTACCAGAAATGAGAATGAGGTGGGGTGGCCATTGAGGAGAAGCTCAGGGAGCAGGTGGTGAAGCGT
GAGGAGCTTTCATCGTCAGCAAGCTGTGGTGCACGTACCATGAGAAGGGCCTGGTAAAAGGAGCCTGCC
AGAAGACTCAGCGACCTGAAGCTGGACTACCTGGACCTCTACCTTATCACTGGCCGACTGGCTTTAA
GCCTGGGAAGGAATTTTCCATTGGATGAGTCGGCAATGTGGTTCAGTACCAACATTCTGGAC
ACGTGGGCGGCCATGGAAGAGCTGGTGGATGAAGGGCTGGTAAAAGCTATTGGCATCTCCAACCTCAACC
ATCTCCAGGTGGAGATGATCTTAAACAAACCTGGCTTGAAGTATAAGCCTGCAGTTAACCAGATTGAGTG
CCACCCATATCTCACTCAGGAGAAGTTAATCCAGTACTGCCAGTCAAAGGCATCGTGGTGACCGCTAC
AGCCCCCTCGGCTCTCCTGACAGGCCCTGGGCCAAGCCGAGGACCTTCTCTCTGGAGGATCCAGGA
TCAAGGCGATCGCAGCCAAGCACAATAAACTACAGCCAGGTCCTGATCCGGTTCCTATGCAGAGGAA
CTTGGTGGTATCCCAAGTCTGTGACACCAGAACGCATTGCTGAGAACTTAAAGTCTTTGACTTTGAA
CTGAGCAGCCAGGATATGACCACCTTACTCAGCTACAACAGGAAGTGGAGGGTCTGTGCCCTGTTGAGCT
GTACCTCCACAAGGATTACCCCTTCCATGAAGAGTTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001628.4](#)

RefSeq Size: 1416 bp

RefSeq ORF: 951 bp

Locus ID: 231

UniProt ID: [P15121](#)

Cytogenetics: 7q33

Domains: aldo_ket_red

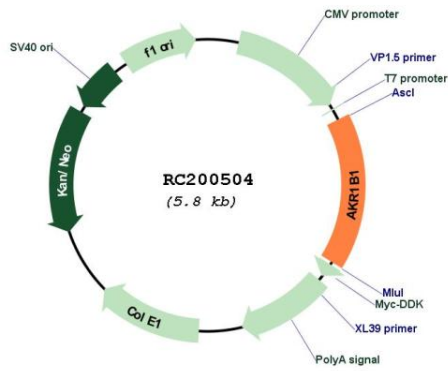
Protein Families: Druggable Genome

Protein Pathways: Fructose and mannose metabolism, Galactose metabolism, Glycerolipid metabolism, Metabolic pathways, Pentose and glucuronate interconversions, Pyruvate metabolism

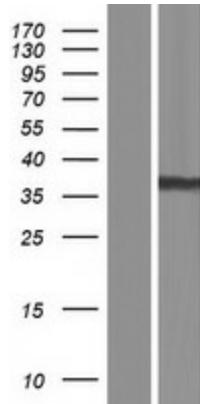
MW: 35.7 kDa

Gene Summary: This gene encodes a member of the aldo/keto reductase superfamily, which consists of more than 40 known enzymes and proteins. 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]

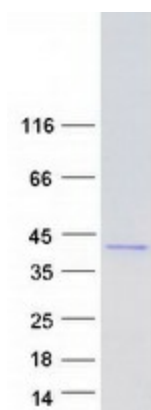
Product images:



Circular map for RC200504



Western blot validation of overexpression lysate (Cat# [LY419838]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200504 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified AKR1B1 protein (Cat# [TP300504]). The protein was produced from HEK293T cells transfected with AKR1B1 cDNA clone (Cat# RC200504) using MegaTran 2.0 (Cat# [TT210002]).