

Product datasheet for MR204723

Akr1d1 (NM_145364) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Akr1d1 (NM_145364) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Akr1d1
Synonyms:	MGC25814
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR204723 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAACCTCAGCGCTGCACACCACCAAATATCCCTAAGTGATGGGAACAACATTCCACTCATTGGGCTTG
GAACCTACTCAGATCCTAGACCGGTCCCTGGGAAGACCTATGTGGCAGTGAAGACAGCTATTGATGAGGG
GTACCGGCACATTGATGGCGCCTATGTTTACCACAATGAGCATGAAGTCGGTGAGGCCATCAGAGAAAAG
ATAGCAGAAGGGAAGGTAAGAGGGAAGAGATCTTCTACTGCGGAAAGTTATGGAATACAGAGCATGTCC
CATCAATGGTCTCCAGCCCTGGAAGGACGCTAAAGGCCCTCAAAGTACATAGACCTTTATAT
TATCGAACTGCCCATGGCCTTTAAGCCTGGAAAGGAAATTTACCCCTAGAGATGAAAATGGCCGAATTATA
TATGACAAAACAAATCTGTGTGCCACGTGGGAGGCATTGGAAGCTTGCAAAGATGCTGGCTTGGTGAAT
CCCTTGGGGTGTCTAATTTAACCAGCAGGAGCTGGAGCTCATCTTGAACAAGCCAGGACTCAAGTACAA
ACCAGTCACTAACCAGGTGGAGTGCCACCCGATTTTACCCAGACAAAACCTTTGAAATTTGCCAGCAG
CATGACATCGTCATTGTCGCACATAGCCCTTAGGGACCTGCCGCAACCCATCATGGGTGAACGTTTCTT
CTCCACCCTTGTTAAATGACGAACCTCTAACCTCACTGGGAAAAAAGTACAATAAGACACAAGCTCAAT
TGTGTTGCGTTTCAACATCCAGCGAGGGATAGTTGTCATTCTCTAAAAGCTTTACCCCGAAAGGATCAAA
GAAAACCTTTCAGATCTTTGACTTTTCTCTCACGGAAGAAGAAATGAAGGACATTGATGCCTTGAATAAAA
ATGTCGGCTATGTGGAGTTGCTCATGTGGAGTGACCATCCTGAATACCCATTTTCATGACGAATAC

ACGCGTACGCGGCCGCTCGAGCAGAAAACCTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR204723 protein sequence
Red=Cloning site Green=Tags(s)

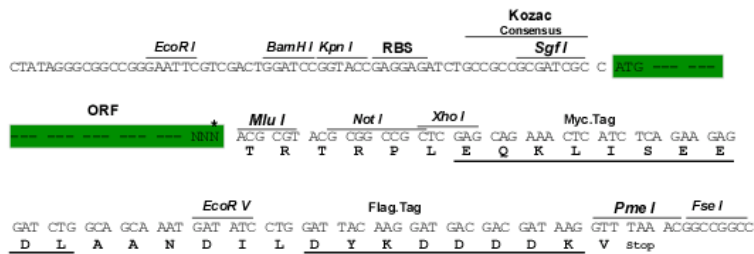
MNLSAAHHQISLSDGNNIPLIGLGTYS DPRPVP GKTYVAVKTAIDEGYRHIDGAYVYHNEHEVGEAIREK
 IAEGKVKREEIFYCGKLWNTEHVPSMVLPALERTLKALKLDYIDL YIIELPMAFKPGKEIYPRDENGRII
 YDKTNLCATWEALEACKDAGLVKSLGVSFNRRQLELILNKPGLKYKPVNTQVECHPYFTQTKLLKFCQQ
 HDIVIVAHSP LGTCRNPSWVNVSSP LLNDELLTSLGKKYNKTQAQIVLRFNIQRGIVVIPKSFTPERIK
 ENFQIFDFSLTEEMKDIDALNKNVRYVELLMWSDHPEYPFHDEY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_145364

ORF Size: 978 bp

OTI Disclaimer: 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. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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: [NM_145364.1](#), [NP_663339.1](#)

RefSeq Size: 2713 bp

RefSeq ORF: 978 bp

Locus ID: 208665

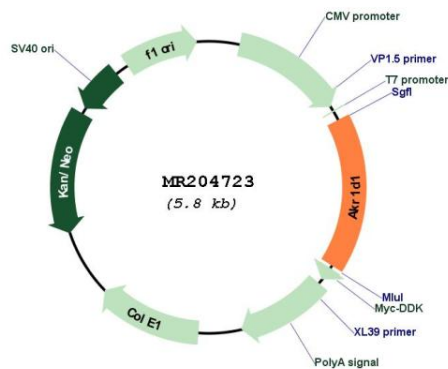
UniProt ID: [Q8VCX1](#)

Cytogenetics: 6 B1

MW: 37.3 kDa

Gene Summary: Catalyzes the stereospecific NADPH-dependent reduction of the C4-C5 double bond of bile acid intermediates and steroid hormones carrying a delta(4)-3-one structure to yield an A/B cis-ring junction. This cis-configuration is crucial for bile acid biosynthesis and plays important roles in steroid metabolism. Capable of reducing a broad range of delta-(4)-3-ketosteroids from C18 (such as, 17beta-hydroxyestr-4-en-3-one) to C27 (such as, 7alpha-hydroxycholest-4-en-3-one).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR204723