

Product datasheet for **RR201425**

Akr1c2 (NM_001013057) Rat Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Akr1c2 (NM_001013057) Rat Tagged ORF Clone
Tag: Myc-DDK
Symbol: Akr1c2
Synonyms: Akr1c21
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
ORF Nucleotide Sequence: >RR201425 representing NM_001013057
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**GCGATCGCC**

ATGAACTCCAAATGTCATTGTGTGAACTGAACGATGGTCATTTTCATTCCGGTCTGGGTTTTGAACTG
CTATGCCCTTCAGAGTTACCCAAGAGTAAAGCTAAGGAGGTACCCAAAATAGCTATAGATGCTGGTTTCCA
TCATTTTGATTCTGCTTTTGTCTACAATACCGAAGATCATGTAGGAGAGGCCATCCGAGAGAAGATTGCC
AATGGCACTACAAGGAGAGAAGATATATTTACACATCAAAGCTTTGGTGTACGAGCCTTACCCAGAAC
TGGTGAGATCTTCCTTGAATGTTCACTGAAGAACTTCAGTTGGACTATGTGGACCTGTATCTCATACA
TTTTCCGATGGCCTTGAACCAGGAGATGAAAATTTCCAGTAGATGAACATGGAAGTTACTATTTGAC
ACAGTAGATCTCTGTGCTACCTGGGAGGCCATGGAGAAGTGAAGGATGCAGGACTGGCCAAGTCCATCG
GGGTGTCCAACCTTAACCGCAGGCAGCTGGAGAAGATCCTGAACAAGCCGGGGCTCAAATACAAGCCTGT
GTGCAACCAGGTAGAATGCCATCTTTATCTCAACCAATGAACTGCTGGATTTCTGCAAGACAAATGCC
TTCTCTTGAATGAACCAGTTCTTAGTTCCATGGCAAAAAATACAATCAAATCCAGCCTTGATTTGCCCT
TCGCCATCAGTTGCAGCGTGGGATTGTGGTACTTAACACCAAGTCTCAAAGAAGAGCGGATCAAAGAGAAC
ATGAAGCTGAGTCCAGAAGATATGAAAGTCTTGTGACCTGAACAGAAATTTGCGGTACATAGCTGGTG
GAATATTTGAAGGCCACCCTAATTTTCCGTTTTTGGATGAATACGAATATTTGAAGGCCACCCTAATTTT
CCGTTTTTGGATGAATAC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RR201425 representing NM_001013057
 Red=Cloning site Green=Tags(s)

MNSKCHCVKLNDFHGFIPVLGFGTAMPSELPKSKAKEVTKIAIDAGFHHFDSAFVYNTEDHVGEAIREKIA
 NGTTRREDIFYTSKLWCTSLHPELVRSLSLECSLKKLQLDYVDLYLIHFPMALKPGDENFPVDEHGKLLFD
 TVDLCATWEAMEKCKDAGLAKSIGVSNFNRRQLEKILNKPGLKYKPVCNQVECHLYLNQMKLLDFCKTNG
 IILVAYGVLGTQRYNGWVDQNSPVLNNEPVLSSMAKKYNQTPALIALRHQLQRGIVVLTSLKEERIKEN
 MKLSPEDMKVLDLNRNRLRYIAGGIFEGHPNFPFLDEYEYLKATLIFRFWMN

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

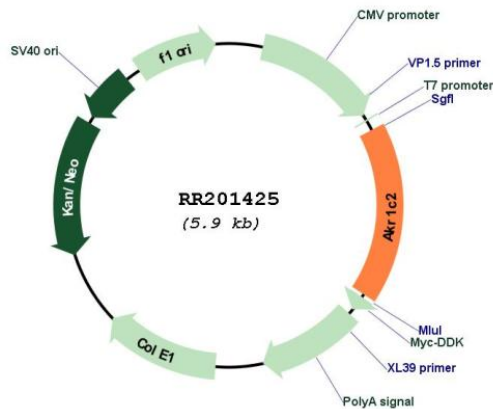
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001013057

ORF Size: 954 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:	<ol style="list-style-type: none">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 Size:	1398 bp
RefSeq ORF:	957 bp
Locus ID:	291283
UniProt ID:	Q6AYQ2
Cytogenetics:	17q12.2
MW:	36.1 kDa
Gene Summary:	NADP-dependent 17-alpha-hydroxysteroid dehydrogenase that converts 5-alpha-androstane-3,17-dione into androsterone. Has lower 3-alpha-hydroxysteroid dehydrogenase activity. Has broad substrate specificity and acts on various 17-alpha-hydroxysteroids, 17-ketosteroids, 3-alpha hydroxysteroids and 3-ketosteroids. Reduction of keto groups is strictly stereoselective. Reduction of 17-ketosteroids yields only 17-alpha-hydroxysteroids. Likewise, reduction of 3-ketosteroids yields only 3-alpha-hydroxysteroids (By similarity).[UniProtKB/Swiss-Prot Function]