

Product datasheet for **RR204756**

Ankle2 (NM_001047901) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ankle2 (NM_001047901) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ankle2
Synonyms:	Ab2-034; RGD1310191
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RR204756 representing NM_001047901
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCTGTGGCAGCGTTGGCTGTGGTGGAGTGGCGGCCCTGGCCTGGGAGCTCCTGGGCGCCTCGGTGC
 TGCTCATCGCCGTGCGCTGGCTGGTCCGGCGCCTGGAGAATCTTTCTCGGACCCGAACCGCTGCGGGAC
 ACTCTCCTCTCTGCCTGGCGCTCTGCAGCGGTGCCGCTCAGCCCGGTGAAGTGATGACAAATGGACGCT
 ATGTTGGCTCGACTGAACTCTTGAATCCAGATGACCTCAGACAAGAAGTTATGAAAGCTGGACTGAAAT
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 TGGACTGCTGACTTCTCTCTTCCAAAGCACAGTGAGGTGACTGGCACGGCATTATCCATGGCACTTCA
 AGGACTCCTGCATTTGTGGACAGGAAACAACTCAGCAGGCCTGTTTATCTGAAGACAGAGATTTGGTT
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 AGAAGAATACCTATCCAGAAGGAGTTAAACAAAAGGCTCAACATGAAATAGGAGAAGAGGAAGGCTGC
 CTTCAGGACAGAACCTCAGATTTTGGCAGTGGAAAGAAGTACAGCAACTCCATCTCCGTGGGAGCGTTTC
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAAGTTTAA

Protein Sequence: >RR204756 representing NM_001047901
 Red=Cloning site Green=Tags(s)

MLWQRLAVVEWAALAWELLGASVLLI AVRWLVRRENLSRDPNRCGTLSSLPGASAAVSAQPGEVMTMDA
 MLARLKLLNPDDL RQEV MKAGL KCGPITSTTRFIFEKLAQALLEQGGLLTSSLPKHSEVTGTAFIHGTS
 RTPAFVDRKQTQQAQLSEDRDFGYSVGLNPPEEEAVTSSVHIPFSASTRNDNHKAGVTTAKEPLLYYGV
 CPVYEDGLVRHERIHVYEDKKEALQAVLIKGSRFKAFPTRDAEFARGICDYLPSPSKNMSLLSPVKA
 MPLCSNDGPKADGLCLAESETVNKERANSYKNPRTQDLTAKLRKAVERGEEHTFSDLIWSNPRYLIGSGD
 NPTIVQEGCRYNVMHVAAKENQASVCQLTLETLENPEFMRLMYPDDNMDMLQKRILYIVDLYLNTPKVGV
 FDTPLHFACKFGNVVVNVLSSHPLIVKNPRNKYGKTPEDVICERSKNKSVELRERIREYLMGHYYVPLL
 RAEDTSPVIGELWSSDQKAEASSADHCRSSPRDPVMTLRAVVGPLSPSKAEDFRKLWKTPPRKKAGLFHS
 IRKSDPERGIERVGREL AHEL GYPWVEYWEFLGCFVDLSSQEGLRLEEYLIQKELNQAQHEIGEEEGC
 LQDRTSDFGSGKKYSNSISVGAFLDGGDDISLEEVKNQONTVPSQSQPSVDKFNQSKSGSPSLGQKADPG
 EAAVGFYPNDRNGFCYPLNSRTADGRETEATNGEEALPPPVSILTQEFDKLNLQSLGDNLFETPNKNRE
 LEDKILASSKGVVESGLASPAAIARLENKQVRTNSEVSEAMAEMSLGPNSPQLGVQAGLEPGFSSATADP
 TKRFLFLSGEESKLRDVLAALECAIIDPGLYPAVHRWKSTVMGYSPSDRQGGYNNVENKCLQLYGRNQ
 EMLLNPSLSLLLEEMVKGFVF

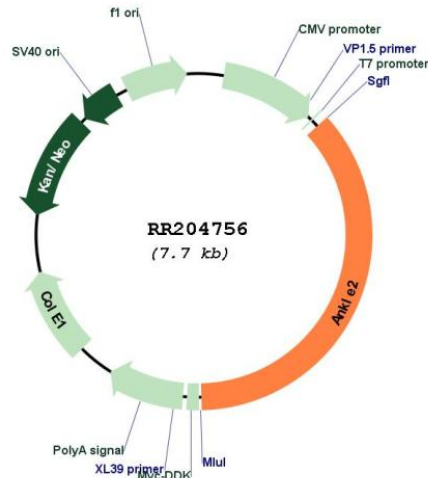
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001047901

ORF Size: 2793 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_001047901.1](#), [NP_001041366.1](#)

RefSeq Size: 2842 bp

RefSeq ORF: 2796 bp

Locus ID: 360829

UniProt ID: [Q7TP65](#)

Cytogenetics: 12q16

MW: 103.4 kDa

Gene Summary: Involved in mitotic nuclear envelope reassembly by promoting dephosphorylation of BAF/BANF1 during mitotic exit. Coordinates the control of BAF/BANF1 dephosphorylation by inhibiting VRK1 kinase and promoting dephosphorylation of BAF/BANF1 by protein phosphatase 2A (PP2A), thereby facilitating nuclear envelope assembly. It is unclear whether it acts as a real PP2A regulatory subunit or whether it is involved in recruitment of the PP2A complex (By similarity).[UniProtKB/Swiss-Prot Function]