

Product datasheet for **RC224135**

ANKRD16 (NM_001009943) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: ANKRD16 (NM_001009943) Human Tagged ORF Clone
Tag: Myc-DDK
Symbol: ANKRD16
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >RC224135 representing NM_001009943
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCAGCCCGGGACCCGCGGCCTCTGCAGGCTGGTGCAGGAGGGCCGGCTGCGCGCCCTGAAGG
AGGAGCTGCAGGCGGCCGGGGCTGCCGGGGCCGGCCGGGATACCTCCTGCACTGCGCCGCGGCCA
CGGGCATCGGGACGTGCTGGCCTATCTGGCCGAGGCTGGGGCATGGACATCGAGGCCACCAACCGAGAC
TACAAGCGGCCTCTGCACGAGGCGGCCTCCATGGGCCACCGAGACTGCGTGCCTACCTGCTGGCCGGG
GGCAGCGGTGACTGCCTGAAGAAGGCCGACTGGACTCCTCTGATGATGGCTGCACAAGGAAGAACCT
GGGGTGATCCAGGAGCTGGTGAACATGGCGCCAATCCACTCCTGAAGAACAAGATGGCTGGAACAGT
TTCCACATTGCCAGTCGAGAAGGCGACCCTCTGATCCTCCAGTACCTGCTCACTGTTTGCCAGGTGCCT
GGAAGACAGAGAGCAAAATTAGAAGGACTCCTCTGCATACTGCAGCAATGCATGGCCATTTGGAGGCAGT
CAAGGTGCTTCTTAAGAGGTGCCAATATGAACCAGACTACAGAGACAACCTGTGGCGTCACCGCCTTGATG
GACGCAATCCAGTGTGGGCACATCGACGTCGCTAGGCTGCTCCTCGATGAACATGGGGCTTGCTTTTCAG
CAGAAGACAGCCTGGGTGCCAGGCTCTGCACAGGGCAGCTGTCACAGGGCAGGACGAAGCCATCCGATT
CTTGGTCTCTGAACCTGGCGTCGATGTAGATGTGAGAGCCACATCAACCCACCTCACAGCACTTCATTAT
GCAGCTAAGCCCTGCATCTGGCCTGTGCAGGTCAGCACTTGGCCTGTGCCAAGTTTCTCCTGCAGTCGGG
AC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >RC224135 representing NM_001009943
Red=Cloning site Green=Tags(s)

MAQPGDPRRLCRLVQEGRLRALKEELQAAGGCPGAGDTLLHCAARHGHRDVLAYLAEAWGMDIEATNRD
 YKRPLHEAASMGRDCVRYLLGRGAAVDCLKKADWTPLMMACTRKNLGVIQELVEHGANPLLNKNDGWNS
 FHIASREGDPLILQYLLTVCPGAWKTESKIRRTPLHTAAMHGHLEAVKVLKRCQYEPDYRDNCVGTALM
 DAIQCGHIDVARLLLDEHGACLSAEDSLGAQALHRAAVTGQDEAIRFLVSELGVDVDVRATSTHLTALHY
 AAKPCIWVQVSTWVPSFSCSRD

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8050_h03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001009943

ORF Size: 912 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_001009943.2](#), [NP_001009943.1](#)

RefSeq Size: 1095 bp

RefSeq ORF: 915 bp

Locus ID: 54522

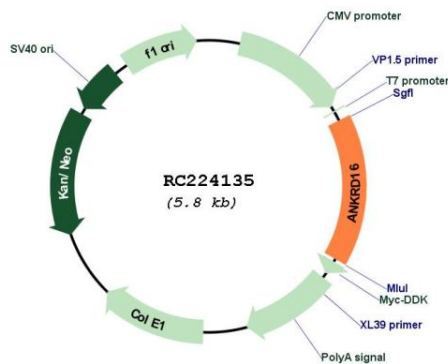
UniProt ID: [Q6P6B7](#)

Cytogenetics: 10p15.1

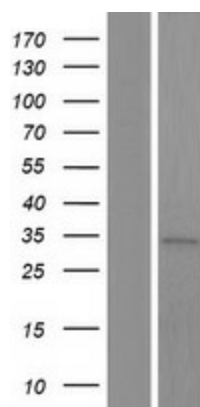
MW: 33.3 kDa

Gene Summary: Required to prevent the misactivation of serine (Ser) with tRNA(Ala) by promoting the hydrolysis of Ser-mischarged tRNA(Ala), thereby playing a role in translational fidelity. Binds directly to the catalytic domain of AARS/AlaRS and captures Ser that is misactivated by AARS/AlaRS, preventing the charging of Ser adenylates to tRNA(Ala) and precluding Ser misincorporation in nascent peptides.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC224135



Western blot validation of overexpression lysate (Cat# [LY423161]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224135 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).