

## Product datasheet for RC209157

### ANKRD16 (NM\_019046) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ANKRD16 (NM_019046) 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:	>RC209157 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCAGCCCGGGACCCGCGGCCTCTGCAGGCTGGTGCAGGAGGGCCGGCTGCGCGCCCTGAAGG  
AGGAGCTGCAGGCGCCGGGGCTGCCGGGGCCGGCCGGGATACCTCCTGCACTGCGCCGCGGCCA  
CGGGCATCGGGACGTGCTGGCCTATCTGGCCGAGGCTGGGGCATGGACATCGAGGCCACCAACCGAGAC  
TACAAGCGCCTCTGCACGAGGCGCCTCCATGGCCACCGAGACTGCGTGCCTACCTGCTGGCCGGG  
GGCAGCGGTGACTGCCTGAAGAAGCCGACTGGACTCCTCTGATGATGGCTGCACAAGGAAGAACCT  
GGGGGTGATCCAGGAGCTGGTGGAAACATGGCGCCAATCCACTCCTGAAGAACAAGATGGCTGGAACAGT  
TTCCACATTGCCAGTCGAGAAGGCGACCCTCTGATCCTCCAGTACCTGCTCACTGTTTGCCAGGTGCCT  
GGAAGACAGAGAGCAAAATTAGAAGGACTCCTCTGCATACTGCAGCAATGCATGGCCATTTGGAGGCAGT  
CAAGGTGCTTCTTAAGAGGTGCCAATATGAACCAGACTACAGAGACAACCTGTGGCGTCACCGCCTTGATG  
GACGCAATCCAGTGTGGGCACATCGACGTCGCTAGGCTGCTCCTCGATGAACATGGGGCTTGCCTTTCAG  
CAGAAGACAGCCTGGGTGCCAGGCTCTGCACAGGGCAGCTGTCACAGGGCAGGACGAAGCCATCCGATT  
CTTGGTCTCTGAACCTGGCGTCGATGTAGATGTGAGAGCCACATCAACCCACCTCACAGCACTTCATTAT  
GCAGCTAAGGAAGGACATACAAGTACAATTCAGACTCTTATCCTTGGGAGCTGACATCAATTCTAAAG  
ATGAAAAAATCGATCAGCCCTGCATCTGGCCTGTGCAGGTGAGCACTTGGCCTGTGCCAAGTTTCTCCT  
GCAGTCGGGACTGAAGGATTCTGAAGACATCACGGGCACCCTGGCTCAGCAGCTCCAAGGAGAGCAGAT  
GTCCTCAGGGCTCTGGCCATAGCGCAATGACA

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



[View online »](#)

**Protein Sequence:** >RC209157 protein sequence  
Red=Cloning site Green=Tags(s)

MAQPGDPRRLCRLVQEGRLRALKEELQAAGGCPGAGDTLLHCAARHGHRDVLAYLAEAWGMDIEATNRD  
 YKRPLHEAASMGRDCVRYLLGRGAAVDCLKKADWTPLMMACTRKNLGVIQELVEHGANPLLNKNDGWNS  
 FHIASREGDPLILQYLLTVCPGAWKTESKIRRTPLHTAAMHGHLAIVKLLKRCQYEPDYRDNCVGTALM  
 DAIQCGHIDVARLLLDEHGACLSAEDSLGAQALHRAAVTGQDEAIRFLVSELGVDVDVRATSTHLTALHY  
 AAKEGHTSTIQTLTLLSLGADINSKDEKNRSALHLACAGQHLACAKFLLQSLKDSIEDITGTLAQQLPRRAD  
 VLQGSQHSAMT

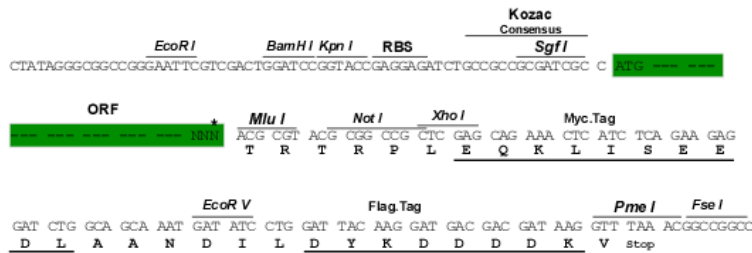
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6781\\_b02.zip](https://cdn.origene.com/chromatograms/mk6781_b02.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_019046

**ORF Size:** 1083 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\\_019046.3](#)

**RefSeq Size:** 2646 bp

**RefSeq ORF:** 1086 bp

**Locus ID:** 54522

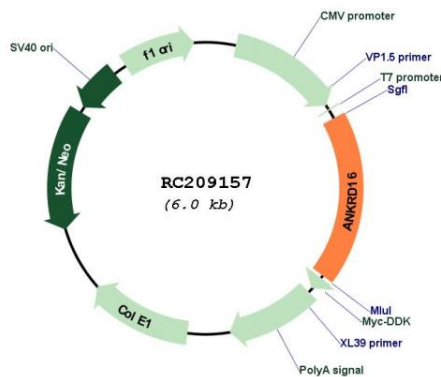
**UniProt ID:** [Q6P6B7](#)

**Cytogenetics:** 10p15.1

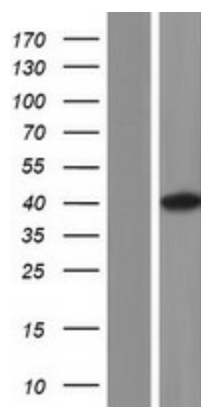
**MW:** 39.3 kDa

**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]

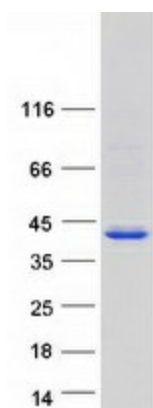
### Product images:



Circular map for RC209157



Western blot validation of overexpression lysate (Cat# [LY423159]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC215131] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ANKRD16 protein (Cat# [TP309157]). The protein was produced from HEK293T cells transfected with ANKRD16 cDNA clone (Cat# RC209157) using MegaTran 2.0 (Cat# [TT210002]).