

## Product datasheet for SC301453

### ANKRD16 (NM\_001009941) Human Untagged Clone

#### Product data:

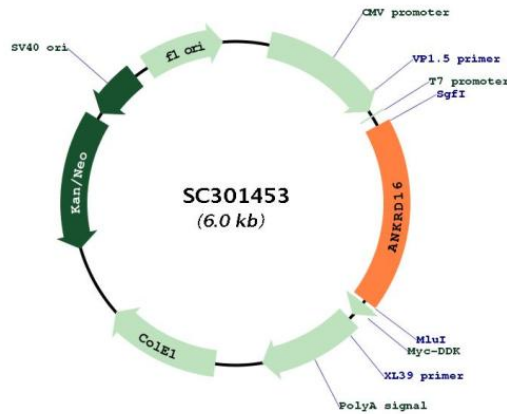
Product Type:	Expression Plasmids
Product Name:	ANKRD16 (NM_001009941) Human Untagged Clone
Tag:	Tag Free
Symbol:	ANKRD16
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC301453 representing NM_001009941. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGCCAGCCGGGGACCCGCGGCCTCTGCAGGCTGGTGCAGGAGGGCCGGCTGCGCGCCCTGAAG
GAGGAGCTGCAGGCGCCGGGGCTGCCGGGGCCGGCCGGGATACCCTCCTGCACTGCGCCGCGCGC
CACGGGCATCGGGACGTGCTGGCCTATCTGGCCGAGGCCCTGGGGCATGGACATCGAGGCCACCAACCGA
GACTACAAGCGGCCTCTGCACGAGGCGGCCTCCATGGGCCACCGAGACTGCGTGCCTACCTGCTGGGC
CGGGGGCAGCGGTCGACTGCCTGAAGAAGGCCGACTGGACTCCTCTGATGATGGCCTGCACAAGGAAG
AACCTGGGGTGATCCAGGAGCTGGTGAACATGGCCCAATCCACTCCTGAAGAACAAGATGGCTGG
AACAGTTTCCACATTGCCAGTCGAGAAGGCGACCCTCTGATCCTCCAGTACCTGCTCACTGTTTGCCCA
GGTGCCTGGAAGACAGAGAGCAAATTAAGAAGGACTCCTCTGCATACTGCAGCAATGCATGGCCATTG
GAGGCAGTCAAGGTGCTTCTTAAGAGGTGCCAATATGAACCAGACTACAGAGACAATGTGGCGTCACC
GCCTTGATGGACGCAATCCAGTGTGGGCACATCGACGTCGCTAGGCTGCTCCTCGATGAACATGGGGCT
TGCCTTTCAGCAGAAGACAGCCTGGGTGCCAGGCTCTGCACAGGGCAGCTGTACAGGGCAGGACGAA
GCCATCCGATTCTTGGTCTCTGAACTTGGCGTCGATGTAGATGTGAGAGCCACATCAACCCACCTACA
GCACCTTATTATGCAGCTAAGGAAGGACATAACAAGTACAATTGACTCTTATCCTTGGGAGCTGAC
ATCAATTCTAAAGATGAAAAAATCGATCAGCCCTGCATCTGGCCTGTGCAGGTCAGCACTTGGCCTGT
GCCAAGTTTCTCCTGCAGTCGGGACTGAAGGATTCTGAAGACATCACGGGCACCTGGCTCAGCAGCTC
CCAAGGAGAGCAGATGTCTTTCAGGGCTCTGGCCATAGCGCAATGACATAA
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
```

Restriction Sites: Sgfl-MluI



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**Plasmid Map:**


**ACCN:** NM\_001009941

**Insert Size:** 1086 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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\\_001009941.2](#)

**RefSeq Size:** 1683 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]  
Transcript Variant: This variant (2) differs in the 3' UTR compared to variant 1. Variants 1 and 2 both encode isoform a.