

Product datasheet for **RG222437**

ANKRD16 (NM_001009942) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ANKRD16 (NM_001009942) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ANKRD16
Synonyms:	ankyrin repeat domain 16; OTTHUMP00000019019; OTTHUMP00000044872
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG222437 representing NM_001009942 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCAGCCCGGGACCCGCGGCCTCTGCAGGCTGGTGCAGGAGGGCCGGCTGCGCGCCCTGAAGG
AGGAGCTGCAGGCGCCGGGGCTGCCCGGGCCGGCGGGATACCTCCTGCACTGCGCCGCGGCCA
CGGGCATCGGGACGTGCTGGCCTATCTGGCCGAGGCTGGGGCATGGACATCGAGGCCACCAACCGAGAC
TACAAGCGGCCTCTGCACGAGGGCGCCTCCATGGCCACCGAGACTGCGTGCCTACCTGCTGGGCCGG
GGCAGCGGTGACTGCCTGAAGAAGGCCGACTGGACTCCTCTGATGATGGCCTGCACAAGGAAGAACCT
GGGGTGATCCAGGAGCTGGTGGACATGGCGCCAATCCACTCCTGAAGAACAAGATGGCTGGAACAGT
TTCCACATTGCCAGTCGAGAAGGCGACCCTCTGATCCTCCAGTACCTGCTCACTGTTGGCCAGGTGCCT
GGAAGACAGAGAGCAAAATTAGAAGGACTCCTCTGCATACTGCAGCAATGCATGGCCATTTGGAGGCAGT
CAAGGTGCTTCTTAAGAGGTGCCAATATGAACCAGACTACAGAGACAACCTGTGGCGTCACCGCCTTGATG
GACGCAATCCAGTGTGGGCACATCGACGTCGCTAGGCTGCTCCTCGATGAACATGGGGCTTGCCCTTCAG
CAGAAGACAGCCTGGGTGCCAGGCTCTGCACAGGGCAGCTGTACAGGACATACAAGTACAATTCAGAC
TCTCTTATCCTTGGGAGCTGACATCAATTCTAAAGATGAAAAAATCGATCAGCCCTGCATCTGGCCTGT
GCAGGTGACACTTGGCCTGTGCCAAGTTTCTCCTGCAGTCGGGACTGAAGGATTCTGAAGACATCACGG
GCACCCGGCTCAGCAGTCCCAAGGAGAGCAGATGTCCTTCAGGGCTCTGGCCATAGCGCAATGACA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG222437 representing NM_001009942
 Red=Cloning site Green=Tags(s)

MAQPGDPRRLCRLVQEGRLRALKEELQAAGGCPGAGDTLLHCAARHGHRDVLAYLAEAWGMDIEATNRD
 YKRPLHEAASMGHRDCVRYLLGRGAVDCLKKADWTPLMMACTRKNLGVIQELVEHGANPLLKKNKDGWNS
 FHIASREGDPLILQYLLTVCPGAWKTESKIRRTPLHTAAMHGHLEAVKVLKRCQYEPDYRDNCVGTALM
 DAIQCGHIDVARLLLDEHGACLSAEDSLGAQALHRAAVTGHTSTIQTLTLLSLGADINSKDEKNRSALHLAC
 AGQHLACAKFLLQSGLKDSEITGTLAQQLPRRADVLQSGSHSMT

TRTRPLE - GFP Tag - V

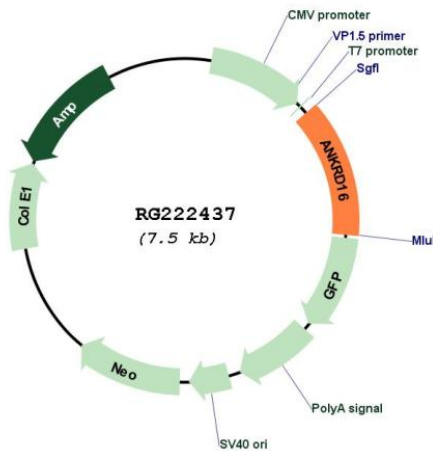
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



Plasmid Map:



ACCN: NM_001009942

ORF Size: 978 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:	NM_001009942.2
RefSeq Size:	1069 bp
RefSeq ORF:	980 bp
Locus ID:	54522
Cytogenetics:	10p15.1
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]