

Product datasheet for MR219138

Ankrd16 (NM_177268) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ankrd16 (NM_177268) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Ankrd16
Synonyms:	2810455F06Rik; AI646698; D430029B21Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR219138 representing NM_177268 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTCTGCCTGGGATCCGCGGCGCCTCTGCAGGCTGGTGCAAGAGGGCCGACTGCGTGACCTTCAGG
AGGAACTGGCGGTAGCTAGAGGTTGCCGGGGCCAGCCGGAGACACCCTTCTCCACTGTGCAGCACGCCA
CGGACGCCAGGATATCCTAGCGTACCTAGTGGAGGCTTGGAGTATGGACATCGAGGCTACCAACCGAGAC
TACAAGCGGCCTCTGCACGAAGCTGCCTCTATGGGCCACCGGACTGCGTGGCTACCTCCTGGGCCGAG
GTGCAGTCGTGGACTCCTTGAAGAAGCGGACTGGACTCCTCTGATGATGGCGTGCACAAGGAAGAACCT
TGATGTGATCCAGGACCTTGTAAGAACCGGTGCCAATCCACTCCTGAAGAACAAGGATGGCTGGAACAGT
TTCCACATTGCCAGTAGAGAAGGCCACCCTGTGATCCTCCGGTACTTGCTCACTGTCTGCCTGATGCTT
GGAAAACAGAGCAACATTAGAAGAACCCTTTACACTGCAGCAATGCACGGCTGTTTGAAGCAGT
CCAGGTGCTTCTTGAAAGGTGTCACTATGAACCAGACTGTCGAGACAACCTGTGGTGTACGCCCTTCATG
GATGCAATTCAGTGTGGCCATGTTAGTATAGCCAAGCTGCTCCTTGAACAGCATAAAGCTTGTCTTTCAG
CTGCAGATAGCATGGGGGCCAGGCTCTACCCGCGCAGCAGTCACTGGGCAGGATGAAGCCATACGGTT
CCTGGTATGCGGTCTTGGCATCGATGTAGATGTAAGAGCAAAGTCAAGCCAGCTCACAGCACTTCACTAT
GCAGCAAAGGAAGGACAGACGAATACAGTCAAACCTCTGTTGCTTGGGTGCCGACATCAACTTACAG
ATGAAAGAAATCGCTCAGTCTGCATCTGGCCTGCGCAGGTGAGCATGTGGCTTGACCAGGCTCCTCCT
ACAGTCGGGACTGAAGGATTCGGAAGACCTCACAGGCACCTTGGCCAGCAGCTCACGAGAAGCGTAGAT
ATCCTTCAGGACTTTGACCATGACGTGAAATCG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR219138 representing NM_177268
Red=Cloning site Green=Tags(s)

MALPGDPRRLCRLVQEGRLRDLQEELAVARGCRGPAGDTLLHCAARHGRQDILAYLVEAWSMDIEATNRD
 YKRPLHEAASMGHRDCVRYLLGRGAVVDSLKKADWTPLMMACTRKNLDVIQDLVEHGANPLLKKNKDGWNS
 FHIASREGHPVILRYLLTVCPDAWKTESNIRRTPLHTAAMHGCLEAVQVLLERCHYEPDCRDNCVTFPM
 DAIQCGHVSIKLLLEQHKACSSAADSMGAQALHRAAVTGQDEAIRFLVCGLGIDVDVRKSSQLTALHY
 AAKEGQNTVQTLTSLGADINSTDERNRSYLHLACAGQHVACTRLLLQSGLKDSEDLTGTLAQQLTRSVD
 ILQDFDHDVKS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9071_a08.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_177268

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_177268.4](#), [NP_796242.2](#)

RefSeq Size: 2356 bp

RefSeq ORF: 1086 bp

Locus ID: 320816

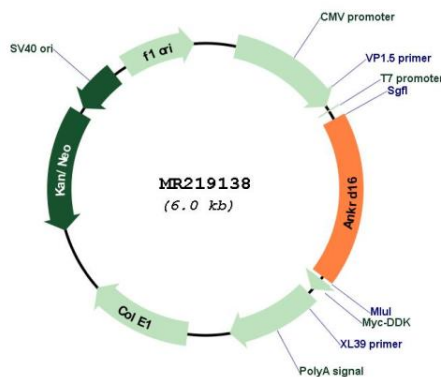
UniProt ID: [A2AS55](#)

Cytogenetics: 2 A1

MW: 39.8 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 (PubMed:29769718). 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 (PubMed:29769718). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR219138