

## Product datasheet for **MC214483**

### Ankrd16 (NM\_177268) Mouse Untagged Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Ankrd16 (NM\_177268) Mouse Untagged Clone  
**Tag:** Tag Free  
**Symbol:** Ankrd16  
**Synonyms:** 2810455F06Rik; AI646698; D430029B21Rik  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**Cell Selection:** Neomycin  
**Fully Sequenced ORF:** >MC214483 representing NM\_177268  
**Red**=Cloning site **Blue**=ORF **Orange**=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**GCGATCGCC**

ATGGCTCTGCCTGGGGATCCGCGGCGCCTCTGCAGGCTGGTGCAAGAGGGCCGACTGCGTGACCTTCAGG  
AGGAACGGCGGTAGCTAGAGGTTGCCGGGGCCAGCCGGAGACACCCTTCTCCACTGTGCAGCAGGCCA  
CGGACGCCAGGATATCCTAGCGTACCTAGTGGAGGCTTGGAGTATGGACATCGAGGCTACCAACCGAGAC  
TACAAGCGGCCTCTGCACGAAGCTGCCTCTATGGGCCACCGGGACTGCGTGCGCTACCTCCTGGGCCGAG  
GTGCAGTCGTGGACTCCTTGAAGAAGGGCGACTGGACTCCTCTGATGATGGCGTGCACAAGGAAGAACCT  
TGATGTGATCCAGGACCTTGTAGAACACGGTGCCAATCCACTCCTGAAGAACAAGGATGGCTGGAACAGT  
TTCCACATTGCCAGTAGAGAAGGCCACCCTGTGATCCTCCGGTACTTGCTCACTGTCTGCCCTGATGCTT  
GGAAAACAGAGCAACATTAGAAGAACCCTTTACACTGCAGCAATGCACGGCTGTTTGAAGCAGT  
CCAGGTGCTTCTTGAAGGTGTCACTATGAACCAGACTGTCGAGACAACGTGGTGTGCACGCCCTTCATG  
GATGCAATTCAGTGTGGCCATGTTAGTATAGCCAAGCTGCTCCTGAACAGCATAAGGCTTGCTCTTCAG  
CTGCAGATAGCATGGGGCCAGGCTCTACACCGCGCAGCACTACTGGGCAGGATGAAGCCATACGTT  
CCTGGTATGCGGTCTTGGCATCGATGTAGATGTAAGAGCAAAGTCAAGCCAGCTCACAGCACTTCACTAT  
GCAGCAAAGGAAGGACAGACGAATACAGTTCAAACCTCTGTTGTCCTTGGGTGCCGACATCAACTCTACAG  
ATGAAAGAAATCGCTCAGTCTGCATCTGGCCTGCGCAGGTGAGCATGTGGCTTGACCAGGCTCCTCCT  
ACAGTCGGGACTGAAGGATTCGAAGACCTCACAGGCACCTTGGCCAGCAGCTCACGAGAAGCGTAGAT  
ATCCTTCAGGACTTTGACCATGACGTGAAATCGTAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_177268



<b>Insert Size:</b>	1086 bp
<b>OTI Disclaimer:</b>	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).
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u>NM_177268.4, NP_796242.2</u>
<b>RefSeq Size:</b>	2356 bp
<b>RefSeq ORF:</b>	1086 bp
<b>Locus ID:</b>	320816
<b>UniProt ID:</b>	<u>A2AS55</u>
<b>Cytogenetics:</b>	2 A1
<b>Gene Summary:</b>	<p>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]</p> <p>Transcript Variant: This variant (1) encodes the longer isoform (1). Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.</p>