

## Product datasheet for **MC222008**

### **Pan3 (NM\_028291) Mouse Untagged Clone**

#### **Product data:**

|                           |  |
|---------------------------|--|
| Product Type:             | Expression Plasmids                    |
| Product Name:             | Pan3 (NM_028291) Mouse Untagged Clone  |
| Tag:                      | Tag Free                               |
| Symbol:                   | Pan3                                   |
| Synonyms:                 | 2700050F09Rik; A430027N15Rik; AU014670 |
| Mammalian Cell Selection: | Neomycin                               |
| Vector:                   | pCMV6-Entry (PS100001)                 |
| E. coli Selection:        | Kanamycin (25 ug/mL)                   |



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**Fully Sequenced ORF:** >MC222008 representing NM\_028291  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGCATCGCC**

ATGAACAGTGGCGGGCGGTGGCTCCCGCCGCCCTCGGCCGCTGCCTCGCCGTCGTCCTCGCTGG  
 CGCGGGCGTGGCGGTGGCGGTGGCGGCCCTCGTCGGGCGTCGGGGCGTCCCCGGCGGGCCGGCGCGGC  
 GGCGGGCGTGAAGCTCAAGTACTGCCGCTACTACGCCAAGGACAAGACGTGCTTCTACGGCGAGGAGTGT  
 CAGTTCCTGCACGAGGACCCAGCCCGCGCGGCCCGGGGCTTGGCTCCATAGCAACAGCGTCCCGC  
 TGGCGCTAGCGGCCGGCCGGGGCCGCTTCTCCGGGAGCGCTCCCGGGCGGGGAGCGGGGCCGC  
 CGCGGGGCCAAGAAGCCGGAGCTGGGCGTCCCGGGGCGGCGACCGGGCGGGGACTCGATGGCCCG  
 CGGTGGCGATTCCGGGAATGGATGGAGGTGCTTAACTGATGCGAGTCTCACAGAGTCTATTTACAGCA  
 CCAGCTTTATTGGAGTCAATGGATTTGGAAGCCCTGTAGAAACAAAGTATCCCTTGATGCAGAGAATGAC  
 TAGTAGTAGCAGCTCCCCAAGCCTTCTAAATGACAGTGCCAAGCCATACACAGGCCACGATCTTCTGACT  
 TCATCTGCTTCATCCTTGTTAATGACTTCGGTGCCTCAACATCTCCAGAGAAGGAAGACACCAATC  
 CTAAGCAAGCAATTTATACCTAAAGGAGGATCAACCTCCAGGCTGAGTAACTGTCCAGTCAATAT  
 GTCTGCCTTCTCAAGTTTTCTCTACCCATCCATGGGAAGTCTGCTACTGCTGGATTAGCACCAGGA  
 ATGTCACTGTCTGCTGGATCTTCCCCTCTCCATCCCCCAAAATTAAGTCCACACACCTCTCTGCTCCTA  
 GAAGAAGAAGCCACACTCCAACCCAGCAAGTTTCATGGTGCCGCTAGTGCCTCCACTCCTGCCAATAA  
 CCCTGCTCCTCAGCCTCCGTCCTCTGGTCAGGTGATCCAGAAGGAGACTGTGGGGGACGACTTACTTC  
 TATACAGATAACAACCCAGCACCTTTGACTGGAATGGTATTTCCAACATCATATTTATCTCCAACCC  
 CACCTCATGTTGCTTATATGCAACCAAAAGCAAATGCACCTTCTTCTTATGGCCGACGACTCCGCA  
 GGAGTGATCAACAGACATTTAATAACGATGGCTCAAATTGACCAAGCAGATATGCCAGCAGTCCCCACA  
 GAAGTTGACAGCTACCATAGCCTGTTCCCTCTAGAACCACTGCCACCTCCAACCGGATACAGAAATCAA  
 GTAATTTTGGATATATCACGTCTTGCTACAAGCTGTAATAGCAAAGATGATCTGCCATATTGCCTTCG  
 GAGGATACATGGTTTTCTGTTTAAACACAAAGTGCATGGTGTGGTTGATATGTGAAAAAATTCAG  
 CACTCAAATATTGAACTCTGCGTGAAGTGTAACTAAAGCATTTGCCGAGCCTTCTCTGGTGTTCG  
 CCTATGATTTCCATGCTGGAGGAGAACTATGATGAGCAGACACTTAAACGACCCGAATTCTGATGCCTA  
 CTTCAAAAGAGGAAGTGGGCCAGCACGATGGACCACTGCCAGCAGCATGCTGGATTGTTACCAGAG  
 TCTCTCATCTGGCATAACATTGTACAGCTGAGTCTGCTCTGCGGACCATTACATACAGCAGTTTTGGCT  
 GTAGAGTAATGGACCAACGAAGATTCTGATAACCAAGCAAACAAGGTTACGAGTAAATTGTAGGAGT  
 CTTTGATGTTTTAACATTTGATAACAGTCAAAATAATAATCCTTTGGCATTAAATGGCTCAGTACCAGCAA  
 GCAGATCTGATATCATTAGGAAAAGTGTGTTGGCTTTGGCTTGAACCTTTTGGCAGGAATTCAGCGAG  
 AAAATTTACAGAAAGCCATGGAATTTGGTGACAATCAACTACTCTGACCTGAAGAACCTCATCTTGTA  
 CTTGTTGACTGACCAAAACAGGATGCGGAGTGTGAATGACATCATGCCATGATTGGTGTCTGGTTTTAC  
 ACTCAATTGGATGCTGCTCAATGAGAAATGATGTTATCGAGGAAGACCTTGCTAAGGAGGTTCAAATG  
 GAAGACTGTTTAGGCTTCTAGCAAAATTTGGAAACAATCAACGAGAGGCCGGAGTTTCAGAAGGATCCAAC  
 CTGGTCAGAGACTGGAGACAGATACCTGTTGAACTCTTTAGAGATCATCTTTTTATCAGGTGACAGAA  
 GCAGGTGCTCCCTGGATCGACCTCAGTCACATATTTCTTGTCTTAACAAGCTAGATGCTGGTGTGCCAG  
 AAAAAATCAGCCTGATTTCCAGAGACGAGAAGAGCGTGTGGTGGTACATACAGTGACCTAAAACGCTG  
 CTTTGAATAACCTTTCAAGAACTGATTGCGGCTGCAAATGGTAACGATCGGAACAGTA**ACTGA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-MluI  
**ACCN:** NM\_028291  
**Insert Size:** 2514 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>                | <a href="#">NM_028291.4</a> , <a href="#">NP_082567.3</a>  |
| <b>RefSeq Size:</b>           | 4628 bp  |
| <b>RefSeq ORF:</b>            | 2514 bp  |
| <b>Locus ID:</b>              | 72587  |
| <b>UniProt ID:</b>            | <a href="#">Q640Q5</a>   |
| <b>Cytogenetics:</b>          | 5 G3   |
| <b>Gene Summary:</b>          | <p>Regulatory subunit of the poly(A)-nuclease (PAN) deadenylation complex, one of two cytoplasmic mRNA deadenylases involved in general and miRNA-mediated mRNA turnover. PAN specifically shortens poly(A) tails of RNA and the activity is stimulated by poly(A)-binding protein (PABP). PAN deadenylation is followed by rapid degradation of the shortened mRNA tails by the CCR4-NOT complex. Deadenylated mRNAs are then degraded by two alternative mechanisms, namely exosome-mediated 3'-5' exonucleolytic degradation, or deadenylation-dependent mRNA decapping and subsequent 5'-3' exonucleolytic degradation by XRN1. PAN3 acts as a positive regulator for PAN activity, recruiting the catalytic subunit PAN2 to mRNA via its interaction with RNA and PABP, and to miRNA targets via its interaction with GW182 family proteins.[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. CCDS Note: The coding region has been updated to extend the N-terminus to one that is supported by available conservation data. The upstream in-frame AUG is conserved in all mammals with available genomic sequences in this region. and results in a 146aa-longer protein, but the splice sites are unaffected.</p> |