

Product datasheet for MC203510

Pan2 (NM_133992) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Pan2 (NM_133992) Mouse Untagged Clone
Tag: Tag Free
Symbol: Pan2
Synonyms: 1200014O24Rik; AI047843; AW742773; mKIAA0710; Usp52
Mammalian Cell Selection: Neomycin
Vector: PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection: Kanamycin (25 ug/mL)
Fully Sequenced ORF: >BC075686

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GATCCAGGTGCTCTATTTCTTGGAGCCTGTTCCGCTGTCTGATCCAGAACCACCTTTGCCAAAAGGAGTTC
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 CTCATTAGAAAAAAAAAAAAAAAAAAAAA

- Restriction Sites:** AscI-NotI
- ACCN:** NM_133992
- Insert Size:** 3603 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).
- 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: [BC075686](#), [AAH75686](#)

RefSeq Size: 4437 bp

RefSeq ORF: 3603 bp

Locus ID: 103135

UniProt ID: [Q8BGF7](#)

Cytogenetics: 10 D3

Gene Summary: Catalytic 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 (PubMed:16284618). Also acts as an important regulator of the HIF1A-mediated hypoxic response. Required for HIF1A mRNA stability independent of poly(A) tail length regulation (By similarity).[UniProtKB/Swiss-Prot Function]

Transcript Variant: This variant (1) represents the longest transcript and it encodes the longest protein (isoform 1). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.