OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MR211796

Pan2 (NM_133992) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pan2 (NM_133992) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Pan2
Synonyms:	1200014O24Rik; AI047843; AW742773; mKIAA0710; Usp52
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR211796 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAACTTTGAGGGTCTGGATCCTGGACTGGCCGAATTTTCCCCAGCTATGCATTCTACCCTGGACCCAG
TCCTGGATGCCCACCTGAATCCAAGTTTGCTACAGAATGTGGAGCTAGACCCAGAGGGAGTGGCCTTGGA
GGCTCTTCCTGTCCAGGAGTCAGTGCACATAATGGAAGGTGTCTACTCTGAGTTGCACAGCGTGGTGGCT
GAAGTGGGAGTGCCTGTGTCTGTCTCCCACTTTGATTTACATGAGGAGATGCTGTGGGTGGGGAGCCATG
GGGGCCATGCCACCTCCTTCTTCGGCCCAGCTCTGGAGCGCTACTCATCCTTTCAGGTCAATGGTGGTGA
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CCTTACCGGCCTGGCCTGTGACCGTTTCCTCAAAGTGTACGATCTGCGCATGATGCGTGCCATCACACCT
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CGGAAGGTAACCATCAAATATTCCAAGCTAGGCCTGGAAGACTTTGACTTCAAACACTACAATAAGACTC
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AATGCAGCTGTCTTCTCAGTGCTGGCACTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR211796 protein sequence
Red=Cloning site Green=Tags(s)

MNFEGLDPGLAEFSPAMHSTLDPVLDAHLNPSLLQNVELDPEGVALEALPVQESVHIMEGVYSELHSVVA
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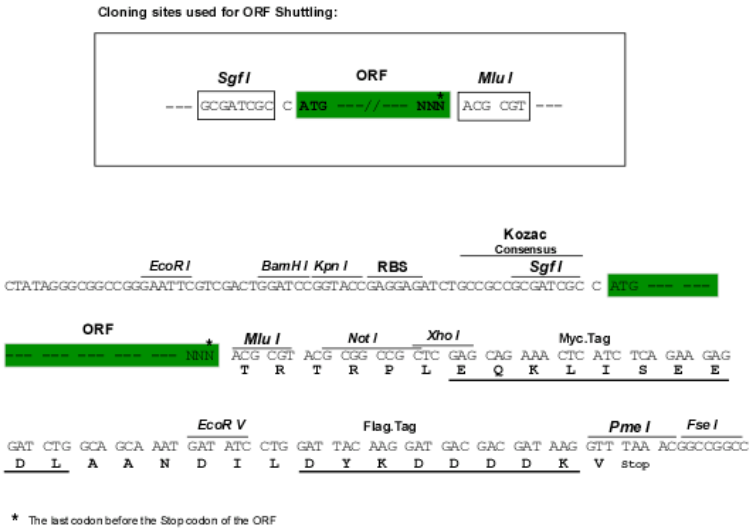
Restriction Sites: SgfI-MluI

Cloning Scheme:

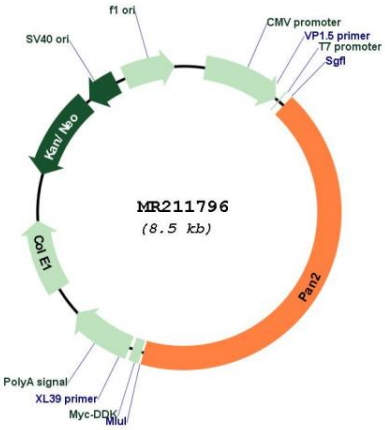


ACCN: NM_133992

ORF Size: 3603 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_133992.3
RefSeq Size:	4450 bp
RefSeq ORF:	3603 bp
Locus ID:	103135
UniProt ID:	Q8BGF7
Cytogenetics:	10 D3
MW:	135.3 kDa
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 deadenlyation-dependent mRNA decaping 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]

Product images:



Circular map for MR211796