

Product datasheet for RC230675

PAN2 (NM_001166279) Human Tagged ORF Clone

Product data:

| | |
|--------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | PAN2 (NM_001166279) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | PAN2 |
| Synonyms: | USP52 |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |
| Cell Selection: | Neomycin |
| ORF Nucleotide Sequence: | >RC230675 representing NM_001166279 Red=Cloning site Blue=ORF Green=Tags(s) |

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAAC**TTT**GAGGGTCTGGACCCTGGACTGGCAGAATATGCCCCAGCCATGCATTCTGCCCTGGACCCTG
TCTTGGATGCCACCTGAACCAAGTCTGCTACAGAATGTGGAGCTGGACCCAGAGGGAGTGGCCTTGG
GGCTCTTCCCGTCCAGGAATCAGTGCACATAATGGAAGGTGTCTACTCTGAATTGCACAGCGTGGTGGCT
GAAGTGGGTGTACCTGTTTCCGTCTCCCACTTTGACTTGCACGAGGAGATGCTGTGGGTGGGAGCCAGC
GGGGCCATGCCACTTCATTTTTGGCCAGCCTTGGAGCGCTACTCATCCTTTCAAGTCAATGGCAGTGA
TGATATTCGGCAGATCCAGAGCCTGGAGAATGGTATCCTTTTTCTCACCAAGAACAACCTCAAGTATATG
GCCCGTGGGGCCTCATTATATTTGATTACCTGCTGGATGAGAATGAGGATATGCACAGTCTCCTACTGA
CTGACAGCAGCACTCTACTCGTTGGTGGGCTGCAGAATCACATACTAGAGATTGATCTTAACACTGTCCA
GGAGACTCAGAAGTATGCAGTAGAGACGCTGGAGTACCATCATGAGACAGACAAATCGCTTCTTCTTC
TGCGGCCACACGTCTGGCAAGGTTCCCTGAGAGACCTCCGTACTTTAAGGTGGAACATGAGTTGATG
CCTTCTCAGGAAGTCTGCAGACTTTGATGTGCATGGCAACCTGCTAGCTGCCTGTGGCTTCTCCAGCCG
CCTCACTGGCCTGGCCTGCGACCGTTTCCCTCAAGGTGTATGATTTGCGCATGATGCGTGCCATCACACCA
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TTGCTTTGCCGTGCTCGTGGACTCACTGCCTCCTCTGGACTGGAGCCAGGACCTGCTGCCTTTTCCCT
CATCCCTGTCCCACTCACCCTGACACACTTCTCTGATTGGCCTGCTGCCAATCTGCTCCAGCTCCC
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CTTCAGCCAGGCTCACTGAGTCACCAGTAGGACGAGAAGAGGAACCACTCTCCACATGGTTTCTAAGAAA
TACCGCAAGGTGACCATCAAATATTCCAAGCTAGGGCTGGAGGACTTTGACTTCAAACACTACAATAAGA



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CCTTGTTTGCTGGATTAGAGCCCCACATTCCEAACGCCTACTGTAAGTGCATGATCCAGGTGCTCTATTT
CCTGGAGCCTGTACGCTGTCTAATTCAAAACCACTTTGCCAGAAGGAGTTCTGTCTGGCATGTGAGCTG
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TACCTTTATTCCACTGATGCTGAATGAGATGCCACAGATTGGGGACCTGGTGGTCTGGATGCTGAGTTT
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TGTCAGTAGCCAGGATTACCTGTGTTCCGGGCCAGGGACCAATGAGGGTATCCCCTTATTGATGACTA
CATCTCTACCCAGGAGCAGGTGGTGGATTACTTGACTCAATACTCGGGTATAAAGCCTGGTACCTCGAT
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AATGCAGCTGTCTTCTCCTCAGTGTGGCGCTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC230675 representing NM_001166279
 Red=Cloning site Green=Tags(s)

MNFEGLDPLAEYAPAMHSALDPVLD AHLNPSLLQNVLDPEGVLEALPVQESVHIMEGVVSELHSVVA
 EVGVPVSVSHFDLHEEMLWVGSHGGHATSFPGPALERYSSFQVNGSDDIRQIQSLENGILFLT KNNLKYM
 ARGGLIIFDYLLDENEDMHSLLLDSSSTLLVGG LQNHILEIDLNTVQETQKYAVETPGVTIMRQTRNFFF
 CGHTSGKVSRLRDLRTFKVEHEFDASGSLSDFDVHG NLLAACGFS SRLTGLACDRFLKVYDLRMMRAITP
 LQVHVDP AFLRFIPTYT SRLAIISQSGQCQFCEPTGLANPADIFHVNVPVGPLLMTFDVSASKQALAFGDS
 EGCVHLWTDSPESFNPYSRETEFALPCLVDSL PPLDWSQDLLPLSLIPVPLTTD TLLSDWPAANSAPAP
 RRAPPVDAEILRTMKKVGFIGYAPNPRTRLRNQIPYRLKESDSEFDSFSQVTESPVGREEEPHLMVSKK
 YRKVTIKYSKLGLEDFDFKHYNKTLFAGLEPHIPNAYCNCMIQVLYFLEPV RCLIQNHLCQKEFCLACEL
 GFLFHMLDL SRGDPCQGNFLRAFRTIPEASALGLILADSDEASGKGNL ARLIQRWNRFILTLQHQM QE
 LEIPQAYRGAGGSFCSSGDSVIGQLFSCEMENCSLCRCGSETVRASSTLLFTLSYPDGSKDKTGKNYDF
 AQVLKRSICLDQNTQAWCDTCEKYOPTIQTRNIRHLPDILVINCEVNSSKEADFWRMQAEVAFKMAVKKH
 GGEISKNEFALADWKELGSP EGVLCPSIEELKNVWLPFSIRMKMTKNKGLDVCNWTGDGEMQWGPARA
 EEEHGVVYDLMATVVHILDSRTGGSLVAHIKVG ETYHQRKEGVT HQQWYLFNDFLIEPIDKHEAVQFDM
 NWKVPAILYYVKNRLNSRYNLNIKNPIEASVLLAEASLARKQRKTH TTFIPLMLNEMPIGDLVGLDAEF
 VTLNEEEAELRSDGKSTIKPSQMSVARITCVRGQGPNEGIPFIDDI STQEQQVVDYLTQYSGIKPGDL D
 AKISSKHLTTLKSTYLKRLFLIDIGVKFVGHGLQKDFRVINLMV PKDQVLDTVYLFHMPRKRMSL RFLA
 WYFLDLKIQGETHDSIEDARTALQLYRKYLELSKNGTEPESFHKV LKGLYEKGRKMDWKVPEPEGQTS PK
 NAAVFSSVLAL

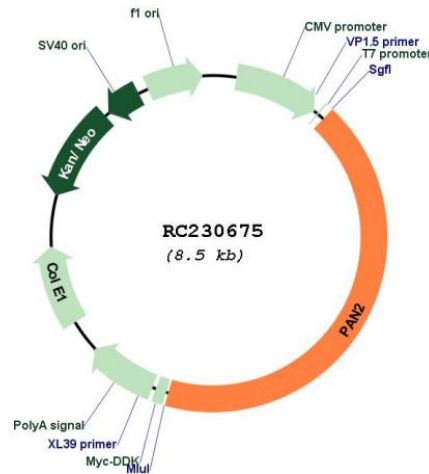
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_001166279

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_001166279.1](#), [NP_001159751.1](#)

RefSeq Size: 5298 bp

RefSeq ORF: 3606 bp

Locus ID: 9924

UniProt ID: [Q504Q3](#)

Cytogenetics: 12q13.3

Protein Families: Protease

MW: 135.3 kDa

Gene Summary: This gene encodes a deadenylase that functions as the catalytic subunit of the polyadenylate binding protein dependent poly(A) nuclease complex. The encoded protein is a magnesium dependent 3' to 5' exoribonuclease that is involved in the degradation of cytoplasmic mRNAs. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Oct 2009]