

Product datasheet for **RG230675**

PAN2 (NM_001166279) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PAN2 (NM_001166279) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PAN2
Synonyms:	USP52
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG230675 representing NM_001166279 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAACCTTGGAGGCTGGACCCTGGACTGGCAGAATATGCCCCAGCCATGCATTCTGCCCTGGACCCTG
TCTTGGATGCCACCTGAACCAAGTCTGCTACAGAATGTGGAGCTGGACCCAGAGGGAGTGGCCTTGGAG
GGCTCTCCCGTCCAGGAATCAGTGCACATAATGGAAGGTGTCTACTCTGAATTGCACAGCGTGGTGGCT
GAAGTGGGTGTACCTGTTCCGCTCTCCACTTTGACTTGCACGAGGAGATGCTGTGGGTGGGAGCCACG
GGGCCATGCCACTTCATTTTTGGCCAGCCTTGGAGCGCTACTCATCCTTTCAAGTCAATGGCAGTGA
TGATATTCGGCAGATCCAGAGCCTGGAGAATGGTATCCTTTTTCTCACCAGAACAACCTCAAGTATATG
GCCCGTGGGGCCCTCATTATATTGATTACCTGCTGGATGAGAATGAGGATATGCACAGTCTCCTACTGA
CTGACAGCAGCACTCTACTCGTTGGTGGGCTGCAGAATCACATACTAGAGATTGATCTTAACACTGTCCA
GGAGACTCAGAAGTATGCAGTAGAGACGCTGGAGTCACCATCATGAGACAGACAAATCGCTTCTTCTTC
TGCGGCCACACGTCTGGCAAGGTTCCCTGAGAGACCTCCGACTTTTAAAGTGGAACATGAGTTTGATG
CCTTCTCAGGAAGTCTGTGACTTTGATGTGCATGGCAACCTGCTAGCTGCCTGTGGCTTCTCCAGCCG
CCTCACTGGCCTGGCCTGCGACCGTTTCTCAAGGTGTATGATTTGCGCATGATGCGTCCATCACACCA
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TTGCTTTGCCGTGTCTCGTGGACTCACTGCCTCCTCTGGACTGGAGCCAGGACCTGCTGCCTTTCCCT
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CTTCAGCCAGTCACTGAGTCACCAGTAGGACGAGAAGAGGAACCATCTCCACATGTTTCTAAGAAA



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TACCGCAAGGTGACCATCAAATATTCCAAGCTAGGGCTGGAGGACTTTGACTTCAAACACTACAATAAGA
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AATGCAGCTGTCTTCTCCTCAGTCTGGCGCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG230675 representing NM_001166279
 Red=Cloning site Green=Tags(s)

MNFEGLDPGLAEYAPAMHSALDPVLDAHLNPSLLQNVELDPEGVALEALPVQESVHIMEGVVSELHSVVA
 EVGVPVSVSHFDLHEEMLWVGSHGGHATSFFGPALERYSSFQVNGSDDIRQIQSLENGILFLTKNNLKYM
 ARGGLIIFDYLLDENEDMHSLLLTDSSLLVGGQLQNHILEIDLNTVQETQKYAVETPGVTIMRQTNRFFF
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 RRAPPVDAEILRTMKKVGFIGYAPNPRTRLRNQIPYRLKESDSEFDSFSQVTESPVGREEEPHLMVSKK
 YRKVTIKYSKLGLEDFDFKHYNKTLFAGLEPHIPNAYCNCMIQVLYFLEPVRLIQNHLCQKEFCLACEL
 GFLFHMLDL SRGDP CQGNFLRAFRTIPEASALGLILADSDEASGKGNLARIQWRNRFILTLQHDMQE
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 AQVLKRSICLDQNTQAWCDTCEKYOPTIQTRNIRHLPDILVINCEVNSSKEADFRMQAEVAFKMAVKKH
 GGEISKNEFALADWKELGSPGVLVCPSEELKNVWLPFSIRMKMTKNKGLDVCNWDGDEMOWGPARA
 EEEHGVVYDLMATVVHILDSRTGGSLVAHIKVGETYHQRKEGVT HQWYLFNDFLIEPIDKHEAVQFDM
 NWKVPAILYYVKNRNLNSRYNLNIKNP IEASVLLAEASLARKQRKTHHTF IPLMLNEMPIGDLVGLDAEF
 VTLNEEEAELRSDGKSTIKPSQMSVARITCVRGQPNEGIPFIDYISTQEQQVVDYLTQYSGIKPGDL
 AKISSKHLTTLKSTYLKRLFLIDIGVKFVGHGLQKDFRVINLMPKDVLDVTYVLFHMPKRKMSLRF
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 PNAVFSSVLAL

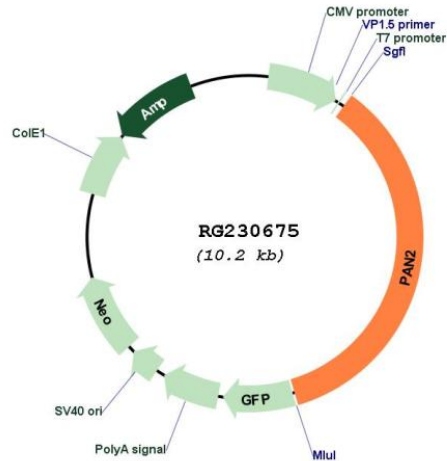
TRTRPLE - GFP Tag - V

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

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]