

Product datasheet for **RG227853**

PALM2AKAP2 (NM_001136562) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PALM2AKAP2 (NM_001136562) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PALM2AKAP2
Synonyms:	AKAP-2; AKAP-KL; AKAP2; AKAPKL; MISP2; PALM2; PALM2-AKAP2; PRKA2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG227853 representing NM_001136562 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCAGAGGCGGAATTGCACAAGGAAAGGCTGCAAGCCATAGCAGAAAAAGAAAGAGGCAGACTGAAA
TAGAAGGCAAGCGACAACAGCTTGACGAGCAGATACTTCTGCTGCAGCATTCCAAGTCCAAAGTGCCTTCG
GGAGAAATGGCTGCTGCAGGGCATAACCCGCTGGAAGTCCGAAGAGGAGGAAGCCAGGAGCGGCAGTCT
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TTGAGGTGTCTGTTGCAGAATGTAAAAGTGTTCCTGGAATCACCTTACCCACATCCCAGGACATCC
CTCCGCTTTCTATTCACCCCGCATAATGGCCTCCTTACTGATCACACGAATCCCTGGATAATGATGTT
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 CGCGAGAGAATGGATGATAGTAGTGTCTCAGAGCCACACGGGTTAATCGAAGAAAGAGCCACTGGCTT
 TGCGCTGGGAAGCAGGGATCTATGCCAACAGGAGGAAGAAGACAACGAA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG227853 representing NM_001136562
 Red=Cloning site Green=Tags(s)

MAEAEHLKERLQAIAEKRKRQTEIEGKRQQLDEQILLLQHSKSKVLREKWLQIGIPAGTAEERARRRQS
 EEDEFVRVQLEDNIQRLEQEIQTLESEESQISAKEQIILEKLEKETEKSFKDFQKGFSSDGDVAVNYISSQ
 LPDLPILCSRTAEPSPGQDGTSTRAAGVWENVLLKEGESASNATETSGPDMTIKKPPQLSEDDIWLKSEG
 DNYSATLLEPAASSLSPDHKNMIEVSVAECKSVPGITSTPHPMDHPSAFYSPPHNGLLTDHHESLDNDV
 AREIRYLDEVLEANCCDSAVDGTYNGTSSPEPGAVLVGGLSPPVHEATQPEPTERTASRQAPPHIELSN
 SSPDPMAEAERTNGHSPSQPRDALGDSLQVPVSPSSTSSRCSRDGEFTLTTLKKEAKFELRAFHEDKK
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 FQLMENSRAQAVAKGQSTPRLFSIKPFYRPLGSVNSDKPLTNPRPSSVGGPPEDSGASAAKQKSPGALET
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 ELDSGLDEL SVRSQDITVLETL SNDF SMDNISDSGASNETTALQENSLADFSLPQTPTDNPSEGRGEG
 VSKSFDHGFYSPSSTLGDSPVDDPLEYQAGLLVQNAIQQAIAEQVDKAVSKTSRDGAEQQGPEATVEE
 AEAFAFGSEKQSMFEPQVSSPVQEKRDVLPKILPAEDRALRERGGPPLPAVQPSGPINMEETRPEGS
 YFSKYSEAAELRSTASLLATQESDVMVGPFLRSRQRQLSMIEEIRAAQEREELKRQRVQLQSTQSP
 RTKNAPSLPSRTCYKTAPGKIEKVKPPPSPTTEGPSLQPDLAPEEAAGTQRPNLMTLMEDYETHKSKR
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TRTRPLE – GFP Tag – V

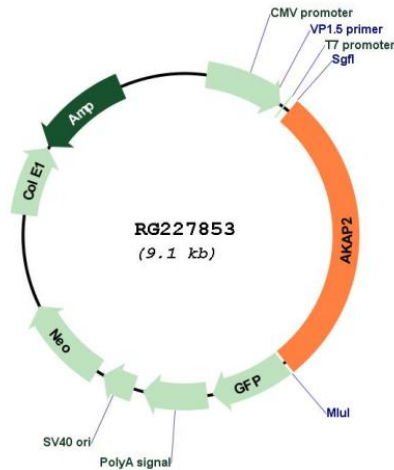
Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM_001136562

ORF Size: 3273 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:	<ol style="list-style-type: none">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:	<u>NM_001136562.2, NP_001130034.1</u>
RefSeq Size:	6815 bp
RefSeq ORF:	2580 bp
Locus ID:	445815
UniProt ID:	<u>Q9Y2D5</u>
Cytogenetics:	9q31.3
Gene Summary:	This gene belongs to the paralemmin downstream gene (PDG) family defined in PMID:22855693. Paralemmin downstream genes may have evolved contiguously with the paralemmin genes and are associated with other paralemmin paralogs in humans and several other taxa. The gene encodes three distinct protein isoforms, the PALM2 isoform, the AKAP2 isoform and the PALM2-AKAP2 isoform. The biological significance of the PALM2-AKAP2 isoforms is yet unknown. Earlier, PALM2 and AKAP2 were annotated as separate genes and PALM2-AKAP2 was annotated as a readthrough gene. [provided by RefSeq, May 2019]