

## Product datasheet for RC215703

### PALM2AKAP2 (NM\_147150) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PALM2AKAP2 (NM_147150) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PALM2AKAP2
Synonyms:	AKAP-2; AKAP-KL; AKAP2; AKAPKL; MISP2; PALM2; PALM2-AKAP2; PRKA2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC215703 representing NM_147150 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
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ATGGCAGAGGCGGAATTGCACAAGGAAAGGCTGCAAGCCATAGCAGAAAAAGAAAGAGGCAGACTGAAA  
TAGAAGGCAAGCGACAACAGCTTGACGAGCAGATACTTCTGCTGCAGCATTCCAAGTCCAAAGTGCCTTCG  
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TTGAGGTGCTGTTGCAGAAATGAAAAGTGTTCCTGGAATCACCTCACCCACATCCCATGGACCATCC  
CTCCGCTTTCTATTCACCCCGCATAAATGGCCTCCTTACTGATACCACGAATCCCTGGATAATGATGTT  
GCCAGAGAGATCCGCTATCTAGATGAGGTGCTAGAGGCCAACTGCTGTGATTCTGCTGTGGATGGAACGT  
ACAATGGAACATCCTCCCGAGAGCCTGGTGCAGTGGTTCTGGTGGGCGGCCTAAGCCCCCTGTCCACGA  
GGCGACCCAGCCAGAACCCTGAAAGAACAGCTAGCCGGCAGGCACCTCCTCACATCGAGCTCAGTAAT  
AGCAGCCCTGACCCCATGGCAGAGGCAGAAAGAACAATGGCCATTCCCGAGCCAGCCTAGAGATGCGC  
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AGTTACAGCAGCAGCAGCAGCAGCCCCATCGCAGCTCTGCACAGCCCCTGCCTTCTCATGAACGCGC  
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CGCGAGAGAATGGATGATAGTAGTGTCTCGAGGCCACACGGGTTAATCGAAGAAAAGCGCACTGGCTT  
TGCCTGGGAAGCAGGGATCTATGCCAACCCAGGAGGAAGAAGACACGAA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC215703 representing NM\_147150  
Red=Cloning site Green=Tags(s)

MAEAEHLKERLQAIAEKRKRQTEIEGKRQQLDEQILLLQHSKSKVLREKWLQIGIPAGTAEERARRRQS  
EEDEFVRVQLEDNIQRLEQEIQTLESEESQISAKEQIILEKLEKETEKSFKDFQKGFSSDGDVAVNYISSQ  
LPDLPIILCSRTAEPSPGQDGTSTRAAGVWENVLLKEGESASNATETSGPDMTIKKPPQLSEDDIWLKSEG  
DNYSATLLEPAASSLSPDHKNMIEVSVAECKSVPGITSTPHPMDHPSAFYSPPHNGLLTDHHESLDNDV  
AREIRYLDEVLEANCCDSAVDGTNGTSSPEPGAVLVGGLSPPVHEATQPEPTERTASRQAPPHIELSN  
SSPDPMAEAERTNGHSPSQPRDALGDSLQVPVSPSSTSSRCSRDGEFTLTTLKKEAKFELRAFHEDKK  
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FQLMENSRQAVAKGQSTPRLFSIKPFYRPLGSVNSDKPLTNPRPSPVGGPPEDSGASAAKQKSPGALET  
PSAAGSQNTASQKQEGPYSEPSKRGPLSKLWAEDGFEFSARAVLTVVKDDDHGILDQFSRSVNVSLTQE  
ELDSGLDEL SVRSQDTTVLETL SNDF SMDNISDSGASNETTALQENSLADFSLPQTPQTDNPSEGRGEG  
VSKSFDHGFYSPSSTLGDSPLDVDDPLEYQAGLLVQNAIQQAIQAEQVDKAVSKTSRDGAEQQGPEATVEE  
AEAAAFGSEKQPMFEPQVSSPVQEKRDVLPKILPAEDRALRERGPPQPLPAVQPSGPINMEETRPEGS  
YFSKYSEAAELRSTASLLATQESDVMVGPFKLRSRQRTL SMIEEIRAAQEREELKRQRQVLQSTQSP  
RTKNAPSLPSRTCYKTAPGKIEKVKPPPSPTTEGPSLQPDLAPEEAAGTQRPKNLMQTLMEDYETHKSKR  
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TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

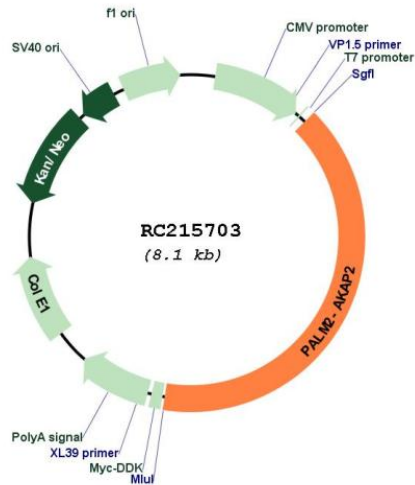
**Restriction Sites:**

Sgfl-Mlul

**Cloning Scheme:**



**Plasmid Map:**



ACCN: NM\_147150

ORF Size: 3270 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.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u>NM_147150.3</u>
<b>RefSeq Size:</b>	7495 bp
<b>RefSeq ORF:</b>	3273 bp
<b>Locus ID:</b>	445815
<b>UniProt ID:</b>	<u>Q9Y2D5</u>
<b>Cytogenetics:</b>	9q31.3
<b>MW:</b>	120.6 kDa
<b>Gene Summary:</b>	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]