

## Product datasheet for RC215638

### PALM2AKAP2 (NM\_007203) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PALM2AKAP2 (NM_007203) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PALM2AKAP2
Synonyms:	AKAP-2; AKAP-KL; AKAP2; AKAPKL; MISP2; PALM2; PALM2-AKAP2; PRKA2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC215638 representing NM_007203 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCCGCATCGCC

ATGGCAGAGGGCGGAATTGCACAAGGAAAGGCTGCAAGCCATAGCAGAAAAAGAAAGAGGCAGACTGAAATAGAAAGGCAAGCGACAACAGCTTGACGAGCAGATACTTCTGCTGCAGCATTCCAAGTCCAAAGTGCCTTCGGAGAAATGGCTGCTGCAGGGCATAACCCGCTGGAAGTCCGAAGAGGAGGAAGCCAGGAGCGGCAGTCTGAAGAGGATGAGTTCAGAGTCAAGCAACTTGAAGATAACATTAGAGGCTGGAGCAAGAAATACAAACGCTAGAAAAGTGAAGAGTCCCAGATATCTGCCAAAGAGCAAATCATCTAGAGAACTGAAGGAAACAGAAAAATCCTTCAAGGACTTTCAGAAGGGTTTCTCCAGTACGGATGGAGATGCAGTAAATTACATTTCTCCAGCTTCCCGACCTGCCAATCCTCTGTTACGAACAGCAGAACCATCACCTGGGCAGGACGGGACCAGCAGAGCGGCTGGAGTCCGGTGGGAGAATGTGCTGCTAAAGGAAGGTGAGTCAGCCTCGAACGCCACAGAAACATCCGGCCAGACATGACTATCAAGAAGCCTCCCGAGCTTTCTGAGGATGATATCTGGCTAAAAAGCGAGGGAACAATATAGTCCACCTCCTGGAGCCTGCTGCCAGCTCTCTTTCCCGAGATCACAAAAATGGAAATGAGGTGCTGTTGCAGAATGTAAAAGTGTCTGGAATCACCTTACCCACATCCCATGGACCATCCCTCCGCTTTCTATTCACCCCGCATAATGGCCTCCTTACTGATCACCACGAATCCCTGGATAATGATGTTGCCAGAGAGATCCGCTATCTAGATGAGGTGCTAGAGGCCAATGCTGTGATTCTGCTGTGGATGGAACGTACAATGGAACATCCTCCCGAGAGCCTGGTGCAGTGGTTCTGGTGGCGGCCTAAGCCCCCTGTCCACGAGGCGACCCAGCCAGAACCCTGAAAGAACAGCTAGCCGGCAGGCACCTCCTCACATCGAGCTCAGTAATAGCAGCCCTGACCCATGGCAGAGGCAGAAAGAACAATGGCCATTCCCGCAGCCAGCCTAGAGATGCGCTGGGGACAGCCTGCAGGTGCCTGTGAGCCAGCTCCACAACCAGCTCACGGTGTCTTCCCGAGATGGAGATTCACTCTCACCACACTGAAAAAGGAGGCCAAGTTTGGAGCTGCGTGCCTTCCATGAGGACAAGAAGCCCTCCAAGCTTTTGGAGTACGAGCATGAGAAAGAACAATACTGCATTAGAAAAGTGAAGCCTTCAGAGGAGATGCTGGAGCTGAAAAGGAGAGGAGAGGCTCATCCGCAGCCAGGCCGTAAGAAGAATCCTGGCATTGCAGCAAAATGGTGAATCCCGCAGGAAAAACCATCGAGGAGCAGCTGGACGAGAACATCTG



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GAGTCGCACAAAAAGTACAAGGAGCGCAAAGAGAGAAGGGCACAGCAGGAACAGTTGCTGCTGCAGAAGC  
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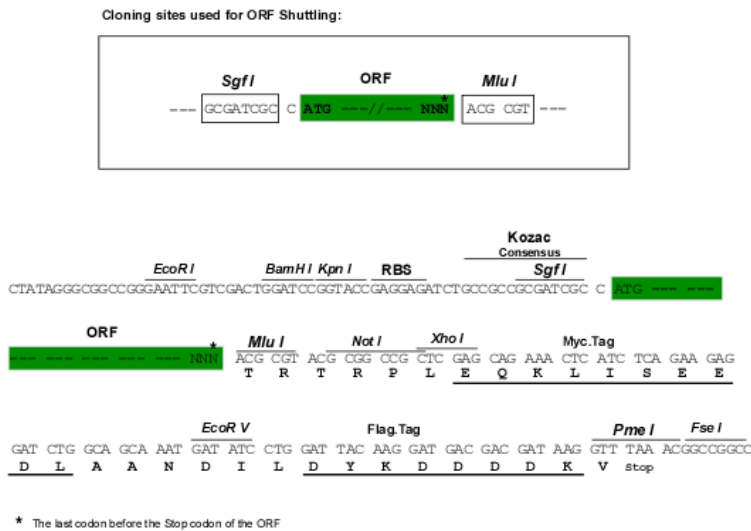
**Protein Sequence:**

>RC215638 representing NM\_007203  
 Red=Cloning site Green=Tags(s)

MAEAEHLKERLQAIAEKRKRQTEIEGKRQQLDEQILLQHSKSKVLREKWLQGIPAGTAEERARRRQS  
 EEDEFVRVQLEDNIQRLEQEIQTLESEESQISAKEQIILEKLEKTEKSFKDFQKGFSSDGDVAVNYISSQ  
 LPDLPILCSRTAEPSPGQDGTSTRAAGVWENVLLKEGESASNATETSGPDMTIKKPPQLSEDDIWLKSEG  
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 FQLMENSRAVAKGQSTPRLFSIKPFYRPLGSVNSDKPLTNPRPPSVGGPPEDSGASAAKGQKSPGALET  
 PSAAGSQNTASQKGEQYSEPSKRGPLSKLWAEDGEFTSARAVLTVVKDDDHGILDQFSRSVNVSLTQE  
 ELDSGLDEL SVRSQDTT VLETL SNDF SMDNISDSGASNETTNALQENSLADFLPQTPQTDNPSEGRGEG  
 VSKFSFDHGFYSPSSTLGDSPLVDDPLEYQAGLLVQNAIQQAIAEQVDKAVSKTSRDGAEQQGPEATVEE  
 AEAAAFGSEKQPMFEPQVSSPVQEKRDVLPKILPAEDRALRERGPPLPAVQPSGPIINMEETREPGS  
 YFSKYSEAAELRSTASLLATQESDVMVGPFLRSRQRTL SMIEEEIRAAQEREELKRQRQVLQSTQSP  
 RTKNAPSLPSRTCYKTAPGKIEKVKPPPSPTTEGPSLQPDLAPEEAAGTQRPNLMQTLMEDYETHSKR  
 RERMDDSSYTSKLLSCKVTSEVLEATRVRNRKSALALRWEAGIYANQEEEDNE

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mk8028\\_e05.zip](https://cdn.origene.com/chromatograms/mk8028_e05.zip)  
 Restriction Sites: SgfI-MluI  
 Cloning Scheme:



ACCN: NM\_007203  
 ORF Size: 3309 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\\_007203.5](#)  
 RefSeq Size: 7522 bp  
 RefSeq ORF: 3312 bp  
 Locus ID: 445815

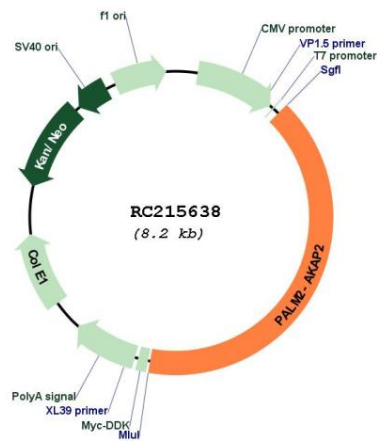
UniProt ID: Q9Y2D5

Cytogenetics: 9q31.3

MW: 121.9 kDa

**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]

**Product images:**



Circular map for RC215638