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Product datasheet for RC206919

PALM2AKAP2 (NM_001037293) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PALM2AKAP2 (NM_001037293) 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:

>RC206919 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCAGAGGCGGAATTGCACAAGGAAAGGCTGCAAGCCATAGCAGAAAAAAGAAAGAGGCAGACTGAAA
TAGAAGGCAAGCGACAACAGCTTGACGAGCAGATACTTCTGCTGCAGCATTCCAAGTCCAAAGTGCTTCG
GGAGAAATGGCTGCTGCAGGGCATACCCGCTGGAACTGCCGAAGAGGAGGAAGCCAGGAGGCGGCAGTCT
GAAGAGGATGAGTTCAGAGTCAAGCAACTTGAAGATAACATTCAGAGGCTGGAGCAAGAAATACAAACGC
TAGAAAGTGAAGAGTCCCGGATATCTGCCAAAGAGCAAATCATCCTAGAGAAACTGAAGGAAACAGAAAA
ATCCTTCAAGGACTTTCAGAAGGGTTTCTCCAGTACGGATGGAGCTGTGTACGCCATGGAAATTAATGTG
GAGAAAGACAAACAAACAGGAGAGACCAAGATCCTCTCTACATCTACCATTGGCCCAGAGGGGGTCCATC
AGAAAGGAGTCAAAGTCTATGATGATGGTACCAAAGTAGTGTATGAGGTGCGCTCAGGAGGCACCGTAGT
AGAAAATGGAGTGCACAAATTAAGCACAAAGGATGTAGAAGAGCTTATTCAGAAGGCTGGACAATCAAGC
TTAGGAGGAGGGCACGTGTCTGAAAGGACTGTGATTGCAGATGGGAGCCTCAGCCATCCCAAGGAACACA
TGCTCTGCAAAGAAGCTAAGTTAGAAATGGTACATAAGTCTAGGAAAGACCATTCTTCCGGGAACCCAGG
GCAGCAGGCCCAAGCCCCCAGCGCTGCAGGGCCGGAGGCAAACTTGGATCAGCCCGTCACCATGATTTTT
ATGGGCTACCAAAATATCGAGGATGAAGAGGAGACGAAAAAGGTGCTAGGCTATGATGAAACCATCAAGG
CTGAATTGGTCCTCATTGATGAAGATGATGAGAAGTCATTGAGGGAGAAGACAGTGACGGACGTGTCCAC
TATTGACGGGAACGCGGCTGAGCTTGTGTCCGGGAGGCCGGTCTCAGACACCACAGAGCCCTCATCCCCA
GAAGGGAAGGAAGAGAGCCTAGCTACAGAGCCAGCCCCAGGTACCCAAAAGAAAAAGCGCTGTCAATGCT
GTGTTGTCATG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

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Protein Sequence:

>RC206919 protein sequence
Red=Cloning site Green=Tags(s)

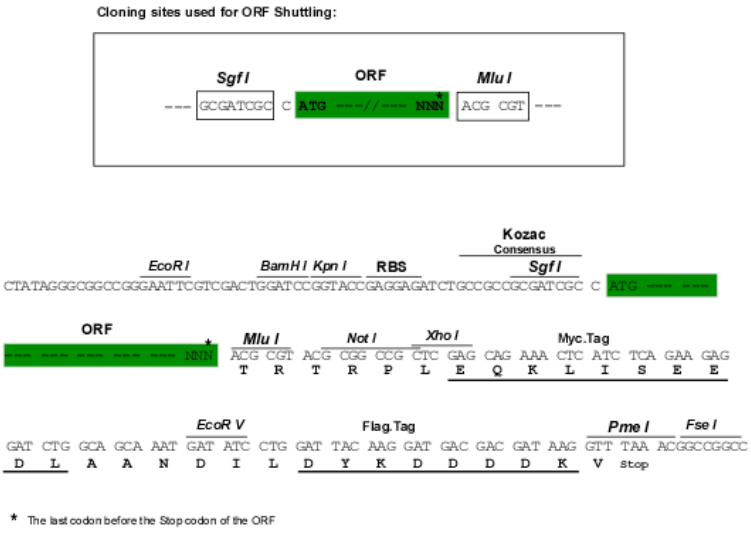
MAEAELHKERLQAIAEKRKRQTEIEGKRQQLDEQILLLQHSKSKVLREKWLLQGIPAGTAEEEEARRRQS
EEDEFRVKQLEDNIQRLEQEIQTLESEESRISAKEQIILEKLKETEKSFKDFQKGFSSTDGAVYAMEINV
EKDKQTGETKILSTSTIGPEGVHQKGVKVYDDGTKVVYEVRSGGTVVENGVHKLSTKDVEELIQKAGQSS
LGGGHVSERTVIADGSLSHPKEHMLCKEAKLEMVHKSRKDHSSGNPGQQAQAPSAAGPEANLDQPVTMIF
MGYQNIEDEEETKKVLGYDETIKAELVLIDEDDEKSLREKTVTDVSTIDGNAAELVSGRPVSDTTEPSSP
EGKEESLATEPAPGTQKKKRCQCCVVM

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6321_h06.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001037293

ORF Size: 1131 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_001037293.2, NP_001032370.1

RefSeq Size: 9286 bp

RefSeq ORF: 1140 bp

Locus ID: 445815

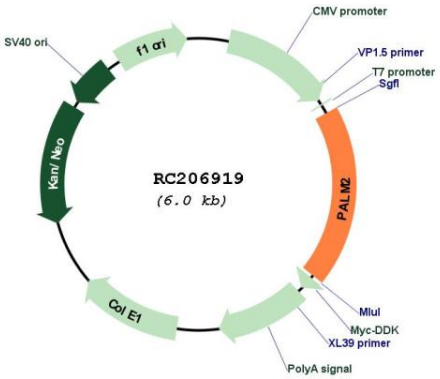
UniProt ID: Q8IXS6

Cytogenetics: 9q31.3

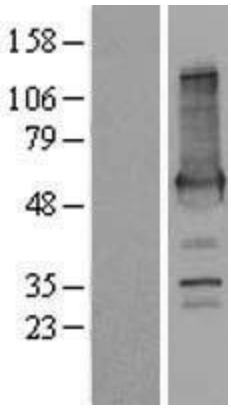
MW: 42 kDa

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]

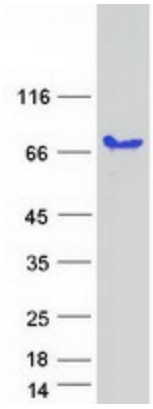
Product images:



Circular map for RC206919



Western blot validation of overexpression lysate (Cat# [LY421942]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206919 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PALM2-AKAP2 protein (Cat# [TP306919]). The protein was produced from HEK293T cells transfected with PALM2-AKAP2 cDNA clone (Cat# RC206919) using MegaTran 2.0 (Cat# [TT210002]).