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Product datasheet for RC206626

PACSIN1 (NM_020804) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PACSIN1 (NM_020804) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PACSIN1
Synonyms:	SDPI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC206626 representing NM_020804
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCCAGCTCCTACGATGAGGCCTCACTGGCGCCAGAGGAGACCACCGACAGCTTCTGGGAGGTGGGGA
ACTACAAGCGGACCGTGAAGCGCATCGATGACGGCCACCGTCTATGCAACGACCTGATGAACTGCGTGCA
GGAGCGCGCCAAGATCGAGAAGGCGTACGGGCAGCAGCTCACCGACTGGGCCAAGCGTTGGCGCCAGCTC
ATCGAGAAAGGCCCACAGTATGGCAGCCTGGAGCGGGCCTGGGGTGCCATAATGACAGAGGCAGACAAGG
TGAGCGAGCTGCACCAGGAGGTGAAGAACAATCTGCTGAATGAGGACCTGGAGAAGGTGAAGAACTGGCA
GAAGGACGCCTATCACAAGCAGATCATGGGTGGCTTCAAGGAGACGAAGGAGGCTGAAGATGGCTTCCGC
AAGGCCCAGAAGCCTTGGGCCAAGAAGATGAAGGAGCTGGAGGCAGCCAAGAAGGCCTACCATTTGGCTT
GCAAAGAGGAAAAGCTGGCCATGACACGGGAGATGAACAGCAAGACGGAGCAATCGGTCACACCTGAGCA
GCAAAAGAAGCTGCAGGACAAAGTGGACAAGTGCAAGCAGGATGTGCAGAAGACACAGGAGAAGTATGAG
AAAGTGCTGGAAGATGTGGGCAAGACCACACCCCAGTACATGGAGAACATGGAGCAGGTGTTTGAGCAAT
GCCAGCAATTTGAGGAAAAGCGGCTGGTCTTCCTCAAGGAGGTGCTGCTGGACATCAAACGGCACCTCAA
CCTGGCTGAGAACAGCAGCTACATCCATGTGTACCGTGAGCTGGAGCAGGCCATCCGGGGGGCTGATGCC
CAGGAAGACCTCAGATGGTTCCGCAGCACCAGTGGCCCCGGCATGCCCATGAACTGGCCCCAGTTTGAGG
AGTGGAACCCAGACCTTCCTCACACCACCACCAAGAAGGAGAAACAGCCTAAGAAGGCAGAGGGAGTGGC
GCTGACCAATGCCACTGGGGCGGTAGAGTCCACATCCCAGGCTGGGGACCGCGGCAGTGTTAGCAGCTAC
GACAGAGGCCAGCCCTACGCCACCGAGTGGTCAGACGACGAGAGTGGGAACCCCTTTGGGGGCAGTGAGA
CCAACGGGGGCGCCAACCCCTTTGAGGACGACTCCAAGGGAGTGCGCGTGCGGGCACTCTACGACTATGA
CGGCCAGGAGCAGGACGAGCTCAGCTTTAAGGCCGGAGACGAACTCACCAAGCTGGGCGAGGAGGATGAG
CAGGGCTGGTGCCGTGGGCGGCTGGACAGCGGGCAGCTGGGCCTCTACCCTGCCAACTACGTGGAGGCTA
TC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC206626 representing NM_020804
Red=Cloning site Green=Tags(s)

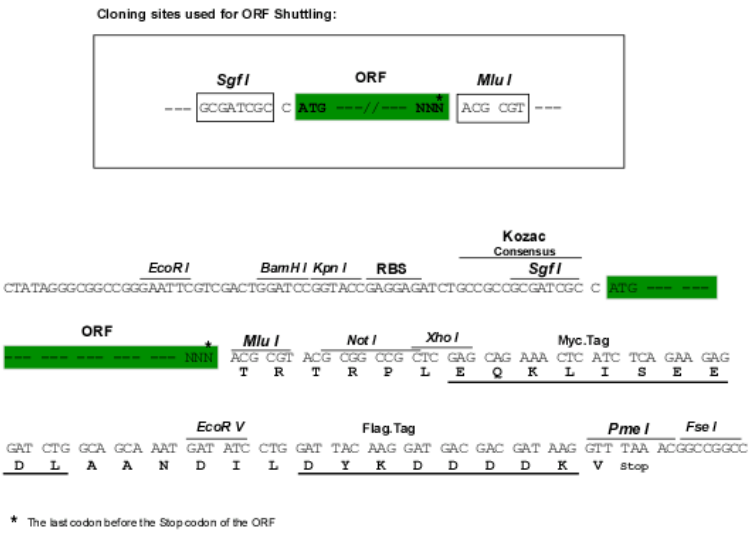
MSSSYDEASLAPEETTDSFWEVGNYKRTVKRIDDGHRLCNDLMNCVQERAKIEKAYGQQLTDWAKRWRQL
IEKGPQYGSLERAWGAIMTEADKVSELHQEVKNNLLNEDLEKVKNWQKDAYHKQIMGGFKETKEAEDGFR
KAQKPWAKKMKELEAAKKAYHLACKEEKLAMTREMNSKTEQSVTPEQQKKLQDKVDKCKQDVQKTQEKYE
KVLEDVGKTTPQYMENMEQVFEQCQQFEEKRLVFLKEVLLDIKRHLNLAENSSYIHVYRELEQAIRGADA
QEDLRWFRSTSGPGMPMNWPQFEEWNPDLPHTTTKKEKQPKKAEGVALTNATGAVESTSQAGDRGSVSSY
DRGQPYATEWSDDESGNPFGGSETNGGANPFEDDSKGVRVRALYDYDGQEQDELSFKAGDELTKLGEEDE
QGWCRGRLDSGQLGLYPANYVEAI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg4271_e07.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_020804

ORF Size: 1332 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_020804.5

RefSeq Size: 4282 bp

RefSeq ORF: 1335 bp

Locus ID: 29993

UniProt ID: Q9BY11

Cytogenetics: 6p21.31

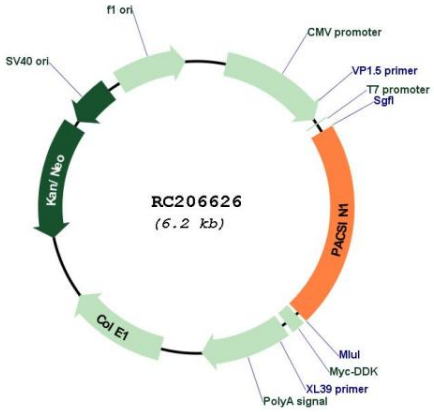
Domains: FCH, SH3

Protein Families: Druggable Genome

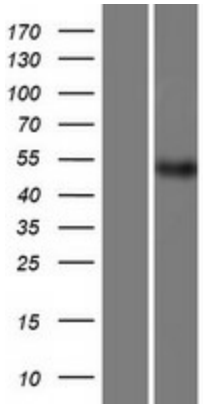
MW: 50.8 kDa

Gene Summary: Plays a role in the reorganization of the microtubule cytoskeleton via its interaction with MAPT; this decreases microtubule stability and inhibits MAPT-induced microtubule polymerization. Plays a role in cellular transport processes by recruiting DNM1, DNM2 and DNM3 to membranes. Plays a role in the reorganization of the actin cytoskeleton and in neuron morphogenesis via its interaction with COBL and WASL, and by recruiting COBL to the cell cortex. Plays a role in the regulation of neurite formation, neurite branching and the regulation of neurite length. Required for normal synaptic vesicle endocytosis; this process retrieves previously released neurotransmitters to accommodate multiple cycles of neurotransmission. Required for normal excitatory and inhibitory synaptic transmission (By similarity). Binds to membranes via its F-BAR domain and mediates membrane tubulation. [UniProtKB/Swiss-Prot Function]

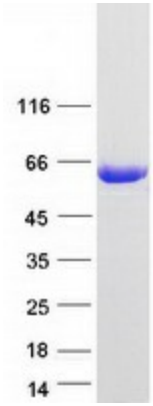
Product images:



Circular map for RC206626



Western blot validation of overexpression lysate (Cat# [LY412198]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206626 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PACSIN1 protein (Cat# [TP306626]). The protein was produced from HEK293T cells transfected with PACSIN1 cDNA clone (Cat# RC206626) using MegaTran 2.0 (Cat# [TT210002]).