

## Product datasheet for **RG234114**

### **PACSIN1 (NM\_001199583) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PACSIN1 (NM_001199583) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PACSIN1
Synonyms:	SDPI
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG234114 representing NM\_001199583  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGTCCAGCTCCTACGATGAGGCCTCACTGGCGCCAGAGGAGACCACCGACAGCTTCTGGGAGTGGGGA  
 ACTACAAGCGGACCGTGAAGCGCATCGATGACGGCCACCGTCTATGCAACGACCTGATGAACTGCGTGCA  
 GGAGCGCGCCAAGATCGAGAAGGCGTACGGGCAGCAGCTCACCGACTGGGCAAGCGTTGGCGCCAGCTC  
 ATCGAGAAAGGCCACAGTATGGCAGCCTGGAGCGGGCCTGGGGTGCCATAATGACAGAGGCAGACAAGG  
 TGAGCGAGCTGCACCAGGAGGTGAAGAACAATCTGCTGAATGAGGACCTGGAGAAGGTGAAGAACTGGCA  
 GAAGGACGCCTATCACAAGCAGATCATGGGTGGCTTCAAGGAGACGAAGGAGGCTGAAGATGGCTTCCGC  
 AAGGCCAGAAGCCTTGGCCAAGAAGATGAAGGAGCTGGAGGCAGCCAAGAAGGCCTACCATTTGGCTT  
 GCAAAGAGGAAAAGCTGGCCATGACACGGGAGATGAACAGCAAGACGGAGCAATCGGTACACCTGAGCA  
 GCAAAAGAAGCTGCAGGACAAAGTGGACAAGTGAAGCAGGATGTGCAGAAGACACAGGAGAAGTATGAG  
 AAAGTGCTGGAAGATGTGGGCAAGACCACCCAGTACATGGAGAACATGGAGCAGGTGTTTGAGCAAT  
 GCCAGCAATTTGAGGAAAAGCGGCTGGTCTTCTCAAGGAGGTGCTGCTGGACATCAAACGGCACCTCAA  
 CCTGGCTGAGAACAGCAGCTACATCCATGTGTACCGTGAGCTGGAGCAGGCCATCCGGGGGGCTGATGCC  
 CAGGAAGACCTCAGATGGTTCGCGAGCACCAGTGGCCCCGGCATGCCATGAACTGGCCCCAGTTTGAGG  
 AGTGGAACCCAGACCTTCTCACACCACCACCAAGAAGGAGAAACAGCCTAAGAAGGCAGAGGGAGTGGC  
 GCTGACCAATGCCACTGGGGCGGTAGAGTCCACATCCCAGGCTGGGGACCGCGGCAGTGTAGCAGCTAC  
 GACAGAGGCCAGCCCTACGCCACCGAGTGGTCAAGCAGCAGAGTGGGAACCCCTTTGGGGCAGTGAGA  
 CCAACGGGGCGCCAACCCCTTTGAGGACGACTCCAAGGAGTGCAGCGTGCAGGCACTCTACGACTATGA  
 CGGCCAGGAGCAGGACGAGCTCAGCTTTAAGGCCGGAGACGAACCTACCAAGCTGGGCGAGGAGGATGAG  
 CAGGGCTGGTGCAGTGGGCGGCTGGACAGCGGGCAGCTGGGCCTCTACCCTGCCAACTACGTGGAGGCTA  
 TC

**ACGCGT**ACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>RG234114 representing NM\_001199583  
 Red=Cloning site Green=Tags(s)

MSSSYDEASLAPEETDTSFWEVGNKRTVKRIDDGHRLCNDLMNCVQERAKIEKAYGQQLTDWAKRWRQL  
 IEKGPQYGSLEAWGAIMTEADKVELHQEVKNNLLNEDLEKVKNWQKDAYHKQIMGGFKETKEAEDGFR  
 KAQKPWAKMKKELEAAKKAYHLACKEEKLAMTREMNSKTEQSVTPEQQKQLQDKVDKCKQDVQKTQEKYE  
 KVLEDTVGTTPQYMNMEQVFEQCQFEEKRVLFLKEVLLDIKRHLNLAENSSYIHVYRELEQAIRGADA  
 QEDLRWFRSTSGPGMPMNWPQFEEWNPDLPHTTTKKEKQPKAEGVALTNATGAVESTSQAGDRGSVSSY  
 DRGQPYATEWSDDDESGNPFGGSETNGGANPFEDDSKGVRYRALYDYDQQEDEL SFKAGDELTKLGEDE  
 QGWCRGRLDSGQLGLYPANYVEAI

**TR**TRPLE – GFP Tag – V

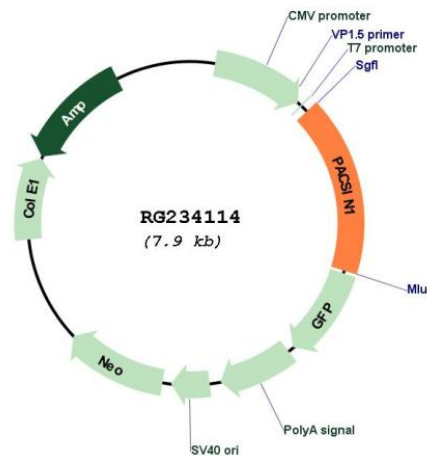
**Restriction Sites:**

SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_001199583

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.

<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_001199583.2, NP_001186512.1</u>
<b>RefSeq Size:</b>	4332 bp
<b>RefSeq ORF:</b>	1335 bp
<b>Locus ID:</b>	29993
<b>UniProt ID:</b>	<u>Q9BY11</u>
<b>Cytogenetics:</b>	6p21.31
<b>Protein Families:</b>	Druggable Genome
<b>Gene Summary:</b>	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]