

Product datasheet for **RR201121L4V**

Camk2a (NM_012920) Rat Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Camk2a (NM_012920) Rat Tagged ORF Clone Lentiviral Particle
Symbol:	Camk2a
Synonyms:	PK2CDD; PKCCD
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_012920
ORF Size:	1434 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RR201121).
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.
RefSeq:	NM_012920.1 , NP_037052.1
RefSeq Size:	1510 bp
RefSeq ORF:	1437 bp
Locus ID:	25400
UniProt ID:	P11275
Cytogenetics:	18q12.1



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Gene Summary:

Calcium/calmodulin-dependent protein kinase that functions autonomously after Ca(2+)/calmodulin-binding and autophosphorylation, and is involved in synaptic plasticity, neurotransmitter release and long-term potentiation. Member of the NMDAR signaling complex in excitatory synapses, it regulates NMDAR-dependent potentiation of the AMPAR and therefore excitatory synaptic transmission (PubMed:15312654). Regulates dendritic spine development. Also regulates the migration of developing neurons. Phosphorylates the transcription factor FOXO3 to activate its transcriptional activity (By similarity). [UniProtKB/Swiss-Prot Function]