

## Product datasheet for **RC210072L4V**

### Phytoceramidase (ACER3) (NM\_018367) Human Tagged ORF Clone Lentiviral Particle

#### Product data:

Product Type:	Lentiviral Particles
Product Name:	Phytoceramidase (ACER3) (NM_018367) Human Tagged ORF Clone Lentiviral Particle
Symbol:	Phytoceramidase
Synonyms:	APHC; PHCA; PLDECO
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
Tag:	mGFP
ACCN:	NM_018367
ORF Size:	801 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC210072).
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. <a href="#">More info</a>
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:	<a href="#">NM_018367.3</a>
RefSeq Size:	3473 bp
RefSeq ORF:	804 bp
Locus ID:	55331
UniProt ID:	<a href="#">Q9NUN7</a>
Cytogenetics:	11q13.5
Protein Families:	Transmembrane
Protein Pathways:	Sphingolipid metabolism



[View online »](#)

MW: 31.4 kDa

**Gene Summary:** Endoplasmic reticulum and Golgi ceramidase that catalyzes the hydrolysis of unsaturated long-chain C18:1-, C20:1- and C20:4-ceramides, dihydroceramides and phytoceramides into sphingoid bases like sphingosine and free fatty acids at alkaline pH (PubMed:20068046, PubMed:26792856, PubMed:20207939, PubMed:11356846, PubMed:30575723). Ceramides, sphingosine, and its phosphorylated form sphingosine-1-phosphate are bioactive lipids that mediate cellular signaling pathways regulating several biological processes including cell proliferation, apoptosis and differentiation (PubMed:20068046). Controls the generation of sphingosine in erythrocytes, and thereby sphingosine-1-phosphate in plasma (PubMed:20207939). Through the regulation of ceramides and sphingosine-1-phosphate homeostasis in the brain may play a role in neurons survival and function (By similarity). By regulating the levels of proinflammatory ceramides in immune cells and tissues, may modulate the inflammatory response (By similarity).[UniProtKB/Swiss-Prot Function]