OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MR201511

Phca (BC023924) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Phca (BC023924) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Phca
Synonyms:	1110057L18Rik; 5430429L08Rik; AV015045; Phca
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>MR201511 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCTCCGGCTGTGGACCGCAAAGGCTATTGGGGCCCCACGACCTCCACATTGGACTGGTGTGAGGAGA
ACTATGTGGTGACCTTGTTCGTCGCTGAGTTCTGGAATACAGTGAGTAACCTGATTATGATCATACCTCC
AATTTTTGGTGCAATTCAAGGCATTAGAGACAGACTGGAGAAGCGGTACATTGCTGCTTACTTAGCACTC
ACAGTGGTAGGAATGGGATCCTGGTGTTTCCACATGACTCTGAAATATGAAATGCAGCTGTTGGATGAGC
TCCCCATGATTTACAGCTGCTGCATATTTGTATACTGCATGTTTGAGTGTTTCAAGACAAAGAGCTCAAT
AAACTACCATCTTCTTTTTACCCTATTTCTATACAGTTTAACAGTAACTACGATTTACCTAAAAGTCAAA
GAACCTATATTCCATCAGGTCATGTATGGAATGTTGGTCTTTACATTAGTACTTCGTTCTATTTATATTG
TTACATGTGTATCTCCAGAGTCTTGTCTGTAC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR201511 protein sequence
Red=Cloning site Green=Tags(s)

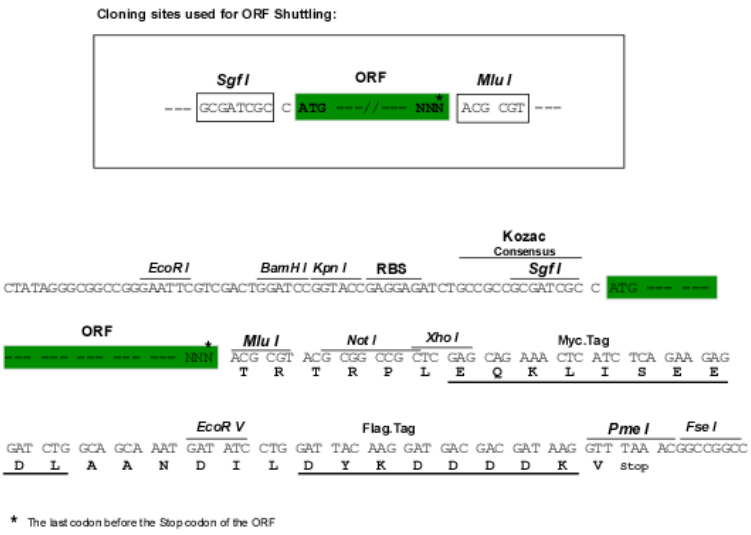
MAPAVDRKGYWGPTTSTLDWCEENYVVTLFVAEFWNTVSNLIMIIPPIFGAIQGIRDRLEKRYIAAYLAL
TVVGMGSWCFHMTLKYEMQLLDELPMIYSCCIFVYCMFECFKTKSSINYHLLFTLFLYSLTVTTIYLKVK
EPIFHQVMYGMLVFTLVLRSIYIVTCVSPESCLY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

View online »

Cloning Scheme:



ACCN: BC023924

ORF Size: 522 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: BC023924, AAH23924

RefSeq Size: 1460 bp

RefSeq ORF: 524 bp

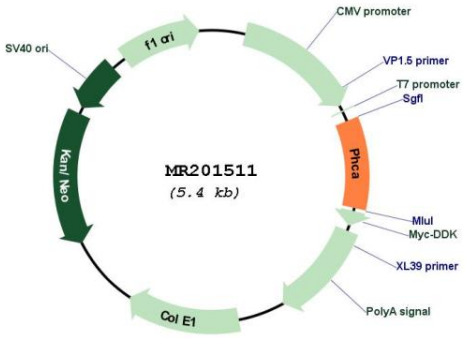
Locus ID: 66190

Cytogenetics: 7 E1

MW: 20.3 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:26474409). 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:26474409). Controls the generation of sphingosine in erythrocytes, and thereby sphingosine-1-phosphate in plasma (By similarity). Through the regulation of ceramides and sphingosine-1-phosphate homeostasis in the brain may play a role in neurons survival and function (PubMed:26474409). By regulating the levels of proinflammatory ceramides in immune cells and tissues, may modulate the inflammatory response (PubMed:26938296).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR201511