

Protein Sequence: >MR205528 protein sequence
Red=Cloning site Green=Tags(s)

MRGQRSLLLGPARLCLRLLLLGYRRRCPLLRGLVQRWRYGKVCRLSLLYNSFGGSDTAVDAAFEFVYV
 LVDNIRWFGVVFVVLVIVLTGSIYAIAYLCVLPILRTYSVPRLCWHFFYSHWNLILIVFHYQAITTP
 PGYPPQGRNDIATVSICKKCIYKPKPARTHHRISICNRCVLKMDHHCPLNNCVGHYNHRYFFSFCFFMTLG
 CVYCSYGSWDLFREAYAAIETYHQTPPTFSFRERITHKSLVYLWFLCSSVALALGALTMWHAVLISRGE
 TSIERHINKERRRLQAKGRVFRNPYNYGCLDNWKVFLGVDTRHWLTRVLLPSSHLPHGNGMSWDPPPP
 VTAHSASVMAV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_023740

ORF Size: 1086 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_023740.1](#), [NM_023740.2](#), [NP_076229.2](#)

RefSeq Size: 1838 bp

RefSeq ORF: 1086 bp

Locus ID: 74168

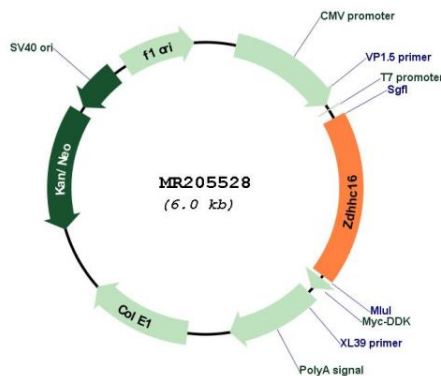
UniProt ID: [Q9ESG8](#)

Cytogenetics: 19 C3

MW: 41.8 kDa

Gene Summary: Palmitoyl acyltransferase that mediates palmitoylation of proteins such as PLN and ZDHHC6 (PubMed:26644582). Required during embryonic heart development and cardiac function, possibly by mediating palmitoylation of PLN, thereby affecting PLN phosphorylation and homooligomerization (PubMed:26644582). Also required for eye development (PubMed:26644582). Palmitoylates ZDHHC6, affecting the quaternary assembly of ZDHHC6, its localization, stability and function (By similarity). May play a role in DNA damage response (PubMed:27159997). May be involved in apoptosis regulation (PubMed:12021275). Involved in the proliferation of neural stem cells by regulating the FGF/ERK pathway (By similarity). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR205528