

Product datasheet for **RC227046**

PNPLA1 (NM_001145716) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PNPLA1 (NM_001145716) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PNPLA1
Synonyms:	ARCI10; dJ50J22.1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC227046 representing NM_001145716
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**C

ATGGTGCAGATGATGAGGCAGTTTCTGTACCGGTCTGCCCGAGGACTCCTACAAGTCAACACGGGGA
 AGCTCCATGTGAGCCTCACCCGCTTAACGACGGGGAGAATGTGGTGGTTTCAGAGTTCACGTCCAAGGA
 GGAGCTCATTGAGGCCCTATACTGCAGCTGCTTCGTCGGGTGTACTGTGGCCTCATCCCCGACTTAC
 CGCGGTGTGTGGGCATTTCTCACTCTGCCCCACAGAGGTACATCGATGGGGGCTTCACGGGCATGCAGC
 CCTGTGCCTTCTGGACCGACGCCATCACCATCTCCACCTTCAGTGGGCAGCAGGACATCTGTCCCCGGGA
 CTGCCCCGCCATCTCCACGACTCCGCATGTTCAACTGCTCCTTCCAGTTCTCCCTGGAGAACATCGCC
 AGGATGACCCACGATTGTTCCCCCGGACCTGGTGATCTGCACGATTACTACTACCGAGGGTACGAGG
 ATGCAGTTTTGTACTTGAGGCGGCTGAATGCTGTTTATCTTAATCTTCTCCAAGAGAGTGATTTTCCC
 CCGGGTGAAGTGTACTGCCAGATAGAAGTCCGCTTGGAATGAGTGCCTGAACGCAGTCAACCAAGC
 CTTGAGCACGGCAGGCCAGTCTGGAAGGAGCCACACAACCTCACAAGGAGTGGGTTCCCAAAGGGGATG
 GAAGGGGCAGCCATGGTCCGCCTGTGTCCCAACCTGTGCAGACACTTGAATTCACATGCGAGTCACTGT
 TTCAGCACCACTCTCCACTTGAGCAGCCACCTGCACAGCCACTGGCCTCTTCAACTCCACTTTCTCTA
 AGTGGCATGCCACCTGTATCATTCCCAGCTGTGCACAAGCCACCCAGCTCCACACCTGGTTCATCACTGC
 CCACCCACCACTGGACTGTCACCTCTGTACCTCAGCAGCAGGTACAACCGTCTGGATCACCAGCCAG
 ATCCCTACACTCTCAGGCACCACTTCAACCCAGGCCATCCCTGGGGCCTTCAACTGTGGGGGCACCTCAA
 ACACTGCCCCGAAGTTCTCTTTCAGCCTTCCCTGCTCAGCCACCTGTGGAGGAAGTAGGCCAAGAACAGC
 CCCAAGCTGTAGCTCTTCTTGTCTTTCAAAACAAAAAGCGCGCTGCCTCTGGTTCATGTAAGGAAAG
 CGTCAGCAAGCCTTATGTAAACGGAGAGCCTGCTGAAGACTCAAACCTGGGTGAATAAGGTCTTCAAGAA
 AACAAGCAAAAGACAAGTGGCACCAGAAAAGGCTTCCCAAGACATTGGGATCCAAAAACCAAGCAGCA
 AAGTGCAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC227046 representing NM_001145716
 Red=Cloning site Green=Tags(s)

MVQMMRQFLYRVLPEDSYKVTTGKLHVSLTRLTDGENVVSEFTSKEELIEALYCSCFVPVYCGLIPTTY
 RGVWAFLLTPQRYIDGGFTGMQPCAFWDAITISTFSGQQDICPRDCPAIFHDFRMFNCSFQFSLENIA
 RMTHALFPPDLVILHDYYYRGYEDAVLYLRRNLNAVYLNSSSKRVIFPRVEVYCQIELALGNECPERSQPS
 LRARQASLEGATQPHKEWVPKGDGRGSHGPPVSQPVQTLFTCESPVSAVPSPLEQPPAQPLASSTPLSL
 SGMPPVSFPAVHKPPSSSTPGSSLPTPPPGLSPLSPQQVQPSGSPARSLHSQAPTSPRPSLGPSTVGAPQ
 TLPRSSLSAFPAQPPVEELGQEQPQAVALLVSSKPKSAVPLVHVKETVSKPYVTESPAEDSNWNKVFVK
 NKQKTSGRKGPRHSGSKKPSKVQ

TRTRPLE**QKL**ISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001145716

ORF Size: 1338 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: [NM_001145716.2](#), [NP_001139188.1](#)

RefSeq Size: 2394 bp

RefSeq ORF: 1341 bp

Locus ID: 285848

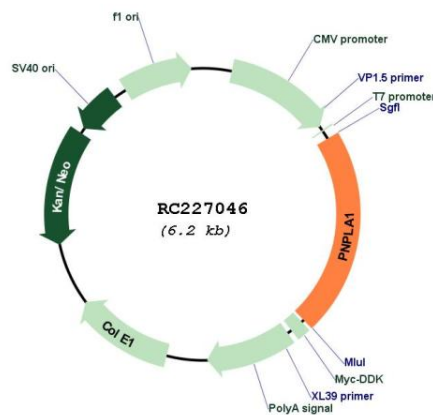
UniProt ID: [Q8N8W4](#)

Cytogenetics: 6p21.31

MW: 48.9 kDa

Gene Summary: The protein encoded by this gene belongs to the patatin-like phospholipase (PNPLA) family, which is characterized by the presence of a highly conserved patatin domain. PNPLA family members have diverse lipolytic and acyltransferase activities, and are key elements in lipid metabolism. While other members of this family have been well characterized, the function of this gene remained an enigma. However, recent studies show that this gene is expressed in the skin epidermal keratinocytes, and has a role in glycerophospholipid metabolism in the cutaneous barrier. Consistent with these observations, mutations in this gene are associated with ichthyosis in human (autosomal recessive congenital ichthyoses, ARCI) and dog. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jun 2012]

Product images:



Circular map for RC227046