

Product datasheet for **RC227055**

PNPLA1 (NM_001145717) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
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: >RC227055 representing NM_001145717
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAAGAACAGGTGTTCAAGGGGGACCCGACACCCCTCACTCCATCTCCTTCTCGGGCAGTGGATTCC
 TCTCCTTCTACGAGCGGGGGCTGTGGACGCCCTGCGGGACCTGGCCCCCGGATGCTGGAACAGCCCA
 CCGCTTTGCGGGGACATCGGCAGGTGCTGTGATCGCCGCCCTGGCCATCTGCGGGATTGAAATGGATGAG
 TATCTCAGAGTCTCAACGTGGGTGTGGCCGAGGTGAAGAAATCCTTCTGGGGCCCTTGTCCCCGTCT
 GTAAGATGGTGAGATGATGAGGCAGTTTCTGTACCGGGTCTGCCGAGGACTCTACAAGGTCAACAC
 GGGGAAGCTCCATGTGAGCCTCACCCGCTTAACGACGCGGGAGAATGTGGTGGTTTCAGAGTTCAGCTCC
 AAGGAGGAGCTCATTGAGGCCCTATACTGCAGCTGCTTCGTCGCGGTGACTGTGGCCTCATCCCCCGA
 CTTACCGCGGTGTGAGGTACATCGATGGGGGCTTACGGGCATGCAGCCCTGTGCCTTCTGGACCGACGC
 CATCACCATCTCCACCTTCAGTGGGCAGCAGGACATCTGTCCCGGGACTGCCCGGCATCTTCCACGAC
 TTCCGATGTTCAACTGCTCCTTCCAGTTCTCCTGGAGAATCGCCAGGATGACCCACGATTGTTCC
 CCCCAGACCTGGTGATCTGCACGATTACTACTACCGAGGGTACGAGGATGCAGTTTGTACTTGAGGCG
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 GAGCAGCCACCTGCACAGCCACTGGCTCTTCAACTCCACTTTCTCTAAGTGGCATGCCACCTGTATCAT
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 ACCTCTGTCACTCAGCAGCAGGTACAACGCTCTGGATCACCAGCCAGATCCCTACACTCTCAGGCACCC
 ACTTACCCAGGCCATCCCTGGGGCCTTCAACTGTGGGGGCACCTCAAACACTGCCCGAAGTTCTCTTT
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 GAGAGCCCTGCTGAAGACTCAAACTGGGTGAATAAGGTCTTCAAGAAGAACAAGCAAAAGACAAGTGCCA
 CCAGAAAAGGCTTCCCAAGACATTCGGGATCCAAAAACCAAGCAGCAAAAGTGACAG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
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Protein Sequence: >RC227055 representing NM_001145717
 Red=Cloning site Green=Tags(s)

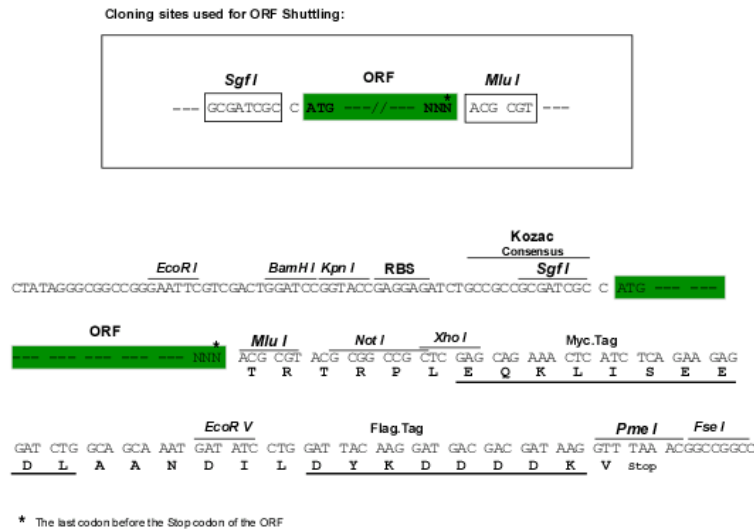
MEEQVFKGDPDTPHSISFSGSGFLSFYQAGAVDALRDLAPRMLETAHRFAGTSAGAVIAALAICGIEMDE
 YLRVLNVGVAEVKKSFLGPLSPCKMVQMMRQFLYRVLPEDSYKVTGKLVSLTRLTDGENVVVSEFTS
 KEELIEALYCSCFVPVYCGIPPTYRGVRYIDGGFTGMQPCAFWDAITISTFSGQQDICPRDCPAIFHD
 FRMFNCFSQFSLNIARMTHALFPDLVILHDYYYRGYEDAVLYLRRNLNAVYLNSSSKRVIFPRVEVYQ
 IELALGNECPERSQPSLRARQASLEGATQPHKEWVPKGDGRGSHGPPVSPVQTLEFTCESPVSAFVSPL
 EQPPAQPLASSTPLSLSGMPVVSFPAVHKPPSSTPGSSLPTPPGLSPLSPQQVQPSGSPARSLHSQAP
 TSPRPSLGPSTVGAPQTLPRSSLAFPAQPPVEELGQEQPQAVALLVSSPKSAVPLVHVKETVSKPYVT
 ESPAESNWNKVFKNKQKTSGRKGFRHSGSKKPSKVQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk8065_h04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001145717

ORF Size: 1596 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_001145717.1](#), [NP_001139189.2](#)

RefSeq ORF: 1599 bp

Locus ID: 285848

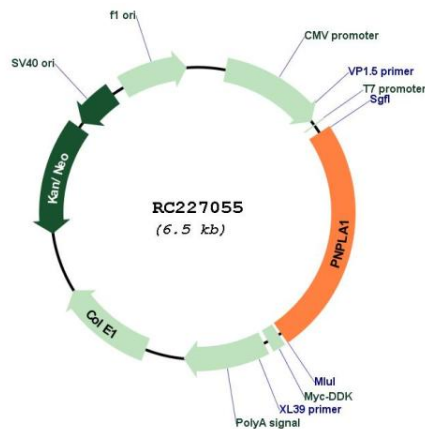
UniProt ID: [Q8N8W4](#)

Cytogenetics: 6p21.31

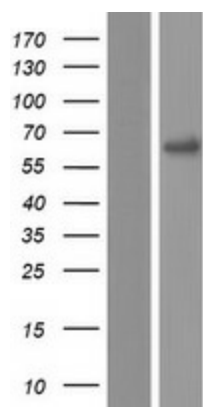
MW: 57.7 kDa

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 RC227055



Western blot validation of overexpression lysate (Cat# [LY428981]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC227055 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).