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Product datasheet for SC326582

PNPLA1 (NM_001145717) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PNPLA1 (NM_001145717) Human Untagged Clone
Tag:	Tag Free
Symbol:	PNPLA1
Synonyms:	ARCI10; dJ50J22.1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

Fully Sequenced ORF:

>SC326582 representing NM_001145717.
Blue=Insert sequence Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGGAAGAACAGGTGTTCAAGGGGGACCCGGACACCCCTCACTCCATCTCCTTCTCGGGCAGTGGATTC
CTCTCCTTCTACCAGGCGGGGGCTGTGGACGCCCTGCGGGACCTGGCCCCCCGGATGCTGGAAACAGCC
CACCGCTTTGCGGGGACATCGGCAGGTGCTGTGATCGCCGCCCTGGCCATCTGCGGGATTGAAATGGAT
GAGTATCTCAGAGTCCTCAACGTGGGTGTGGCCGAGGTGAAGAAATCCTTCCTGGGGCCCTTGTCCCCG
TCCTGTAAGATGGTGCAGATGATGAGGCAGTTTCTGTACCGGGTCCTGCCCGAGGACTCCTACAAGGTC
ACCACGGGGAAGCTCCATGTGAGCCTCACCCGCTTAACGGACGGGGAGAATGTGGTGGTTTCAGAGTTC
ACGTCCAAGGAGGAGCTCATTGAGGCCCTATACTGCAGCTGCTTCGTCCCGGTGTACTGTGGCCTCATC
CCCCCGACTTACCGCGGTGTGAGGTACATCGATGGGGGCTTCACGGGCATGCAGCCCTGTGCCTTCTGG
ACCGACGCCATCACCATCTCCACCTTCAGTGGGCAGCAGGACATCTGTCCCCGGGACTGCCCGGCCATC
TTCCACGACTTCCGCATGTTCAACTGCTCCTTCCAGTTCTCCCTGGAGAACATCGCCAGGATGACCCAC
GCATTGTTCCCCCCGGACCTGGTGATCCTGCACGATTACTACTACCGAGGGTACGAGGATGCAGTTTTG
TACTTGAGGCGGCTGAATGCTGTTTATCTTAATTCTTCCTCCAAGAGAGTGATTTTCCCCCGGGTGGAA
GTGTACTGCCAGATAGAACTCGCCCTTGGCAATGAGTGCCCTGAACGCAGTCAACCAAGCCTTCGAGCA
CGGCAGGCCAGTCTGGAAGGAGCCACACAACCTCACAAGGAGTGGGTTCCCAAAGGGGATGGAAGGGGC
AGCCATGGTCCGCCTGTGTCCCAACCTGTGCAGACACTTGAATTCACATGCGAGTCACCTGTTTCAGCA
CCAGTCTCTCCACTTGAGCAGCCACCTGCACAGCCACTGGCCTCTTCAACTCCACTTTCTCTAAGTGGC
ATGCCACCTGTATCATTCCCAGCTGTGCACAAGCCACCCAGCTCCACACCTGGTTCATCACTGCCCACC
CCACCACCTGGACTGTCACCTCTGTCACCTCAGCAGCAGGTACAACCGTCTGGATCACCAGCCAGATCC
CTACACTCTCAGGCACCCACTTCACCCAGGCCATCCCTGGGGCCTTCAACTGTGGGGGCACCTCAAACA
CTGCCCCGAAGTTCTCTTTCAGCCTTCCCTGCTCAGCCACCTGTGGAGGAACTAGGCCAAGAACAGCCC
CAAGCTGTAGCTCTTCTTGTCTCTTCAAAACCAAAAAGCGCCGTGCCTCTGGTTCATGTGAAGGAAACC
GTCAGCAAGCCTTATGTAACGGAGAGCCCTGCTGAAGACTCAAACTGGGTGAATAAGGTCTTCAAGAAG
AACAAGCAAAAGACAAGTGGCACCAGAAAAGGCTTCCCAAGACATTCGGGATCCAAAAAACCAAGCAGC
AAAGTGCAGTGA
ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT
TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC

Restriction Sites: SgfI-MluI

ACCN: NM_001145717

Insert Size: 1599 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_001145717.1
RefSeq Size:	2478 bp
RefSeq ORF:	1599 bp
Locus ID:	285848
UniProt ID:	Q8N8W4
Cytogenetics:	6p21.31
MW:	57.9 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] Transcript Variant: This variant (3) contains an alternate 5' terminal exon compared to variant 1, resulting in translation initiation from an in-frame upstream start codon, and a longer isoform (3) with a distinct N-terminus compared to isoform 1. Isoform 3 contains the N-terminal catalytic patatin domain, that is conserved in other mammalian orthologs (mouse, rat, cow), and essential for lipase activity (PMIDS:16799181, 22246504).