

Product datasheet for **RC204735**

Pancreatic Lipase (PNLIP) (NM_000936) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pancreatic Lipase (PNLIP) (NM_000936) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Pancreatic Lipase
Synonyms:	PL; PNLIPD; PTL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC204735 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGCTGCCACTTTGGACTCTTTCACTGCTGCTGGGAGCAGTAGCAGGAAAAGAAGTTTGCTACGAAAGAC
 TCGGCTGCTTCAGTGATGACTCCCCATGGTCAGGAATTACGGAAGACCCCTCCATATATTGCCTTGGTC
 TCCAAAAGATGTCAACACCCGCTTCTCTATATACTAATGAGAACCCTCAACTTTCAAGAAAGTTGCC
 GCAGATTCATCAAGCATCAGTGGCTCCAATTTCAAACAATAGAAAACTCGCTTTATTATTCATGGAT
 TCATAGACAAGGGAGAAGAAAAGTGGCTGGCCAATGTGTGCAAGAATCTGTTCAAGGTGGAAAGTGTGAA
 CTGTATCTGTGTGGACTGGAAAGGTGGCTCCCGAACTGGATACACACAAGCCTCGCAGAATCAGGATC
 GTGGGAGCAGAAGTGGCATATTTTGTGAATTTCTTCAGTCGGCGTTCCGTTACTCACCTCCAACGTGC
 ATGTCATTGGCCACAGCCTGGGTGCCACGCTGCTGGGGAGGCTGGAAGGAGAACCAATGGGACCATTGG
 ACGCATCACAGGTTGGACCCAGCAGAACCTTGTCTTCAGGGCACACCTGAATTAGTCCGATTGGACCCC
 AGCGATGCCAAATTTGTGGATGTAATTCACACGGATGGTGCCCCATAGTCCCAATTTGGGGTTTGAA
 TGAGCCAAGTCGTGGGCCACCTAGATTTCTTCCAAATGGAGGAGTGGAATGCCTGGATGTAAAAAGAA
 CATTCTCTCAGATTGTGGACATAGACGGAATCTGGGAAGGGACTCGAGACTTTGCGGCCTGTAATCAC
 TTAAGAAGCTACAAATATTACACTGATAGCATCGTCAACCCTGATGGCTTTGCTGGATCCCCTGTGCC
 CTTACAACGTCTTCACTGCAAACAAGTGTTCCTTGTCCAAGTGGAGGCTGCCACAGATGGGTCACTA
 TGCTGATAGATACCTGGGAAAACAATGATGTGGGCCAGAAATTTATCTAGACTGGTATGCCAGT
 AATTTTGCACGTTGGAGGTATAAGGTATCTGTCACTGTCTGAAAAAAGGTTACAGGACACATACTAG
 TTTCTTTGTTCCGAAATAAAGGAACTTAAGCAGTATGAAATTTCAAGGGCACTCTCAAACAGATAG
 TACTATTCCAATGAATTTGACTCAGATGTGGATGTTGGGGACTTGCAGATGGTTAAATTTATTTGGTAT
 AACAAATGTGATCAACCAACTTTACCTAGAGTGGAGCATCCAAGATTATAGTGGAGACAATGTTGGAA
 AACAGTCAACTTCTGTAGTCCAGAAACCGTCAGGGAGGAAGTTCTGCTCACCTCACACCGTGT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC204735 protein sequence
 Red=Cloning site Green=Tags(s)

MLPLWTLSELLGAVAGKEVCYERLGCFSDDSPWSGITERPLHILPWSPKDVNTRFLLYTNENPNNFQEVA
 ADSSSISGSNFKNTRKTRFIIHGFDKGEENWLANVCKNLFKVESVNCICVDWKGSRGTGYTQASQNI
 VGAEVAYFVEFLQSAFGYSPSNVHVIGHSLGAHAAGEAGRRTNGTIGRITGLDPAEPCFQGTPEL
 VRLDPSDAKFVDVIHTDGAPIVFNLFMGMSQVVGHLDFPNGGVEMPGCKKNILSQIVDIDGIWEGTRDF
 AACNLRLSYKYYTDSIVNPDGFAGFPCASYNVFTANKCFPCPSGGCPQMGHYADRYPGKTNVVGQK
 FYLDTGDASNFARWRYKVSVTLSGKKVTGHILVSLFGNKGNSKQYEIFKGTLPDSTHSNEFSDVDV
 GDLQMVKFIWYNNVINPTLPRVGASKIIVETNVGKQFNFCSPETVREEVLLTLTPC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6421_g11.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_000936

ORF Size: 1395 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_000936.3](#), [NP_000927.1](#)

RefSeq Size: 1502 bp

RefSeq ORF: 1398 bp

Locus ID: 5406

UniProt ID: [P16233](#)

Cytogenetics: 10q25.3

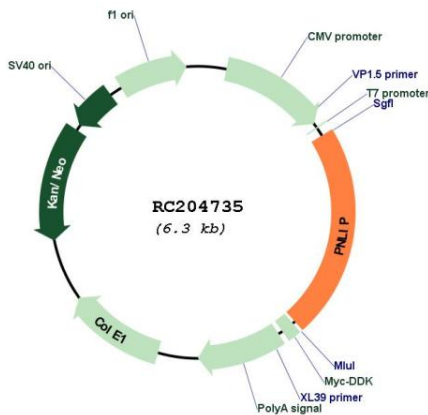
Protein Families: Druggable Genome, Secreted Protein

Protein Pathways: Glycerolipid metabolism, Metabolic pathways

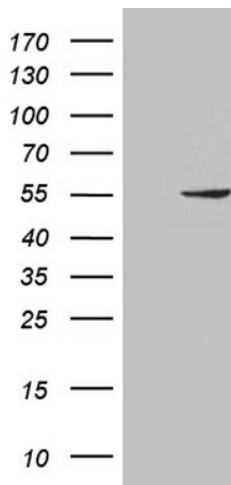
MW: 51.2 kDa

Gene Summary: This gene encodes a member of the lipase family of proteins. The encoded enzyme is secreted by the pancreas and hydrolyzes triglycerides in the small intestine, and is essential for the efficient digestion of dietary fats. Inhibition of the encoded enzyme may prevent high-fat diet-induced obesity in mice and result in weight loss in human patients with obesity. Mutations in this gene cause congenital pancreatic lipase deficiency, a rare disorder characterized by steatorrhea. [provided by RefSeq, Jul 2016]

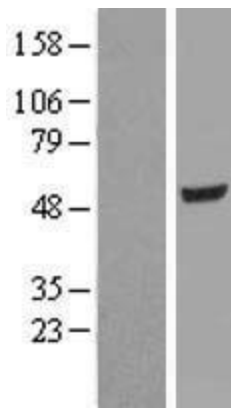
Product images:



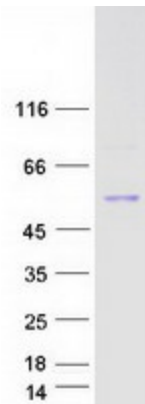
Circular map for RC204735



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PNLIP (Cat# RC204735, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PNLIP (Cat# [TA811702])(1:2000). Positive lysates [LY424451] (100ug) and [LC424451] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY424451]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204735 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PNLIP protein (Cat# [TP304735]). The protein was produced from HEK293T cells transfected with PNLIP cDNA clone (Cat# RC204735) using MegaTran 2.0 (Cat# [TT210002]).