

Product datasheet for **RC205708**

Adipose Triglyceride Lipase (PNPLA2) (NM_020376) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Adipose Triglyceride Lipase (PNPLA2) (NM_020376) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Adipose Triglyceride Lipase
Synonyms:	1110001C14Rik; ATGL; FP17548; iPLA2zeta; PEDF-R; TTS-2.2; TTS2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC205708 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGTTTCCCCGCGAGAAGACGTGGAACATCTCGTTCGCGGGCTGCGGCTTCTCGGCGTCTACTACGTCG
 GCGTGGCCTCCTGCCTCCGCGAGCACGCGCCCTTCTGGTGGCCAACGCCACGCACATCTACGGCGCCTC
 GGCGGGGCGCTCACGGCCACGGCGCTGGTCACGGGGTCTGCCTGGGTGAGGCTGGTGCCTAAGTTCATT
 GAGGTATCTAAGAGGCCCGGAAGCGGTTCTGGGCCCTGCACCCCTCCTTCAACCTGGTAAAGATCA
 TCCGCAGTTTCTGCTGAAGTCTGCCTGCTGATAGCCATGAGCATGCCAGTGGGCGCTGGGCATCTC
 CCTGACCCGCGTGTGACGCGGAGAATGTCATTATATCCCACTCAACTCCAAGGACGAGCTCATCCAG
 GCCAATGTCTGCAGCGGTTTCATCCCCGTACTGTGGGCTCATCCCTCCCTCCAGGGGTGCGCT
 ACGTGGATGGTGGCATTTCAGACAACCTGCCACTCTATGAGCTTAAGAACCACATCACAGTGTCCCCTT
 CTGGGCGAGAGTGACATCTGTCCGAGGACAGCTCCACCAACATCCACGAGCTGCGGGTACCAACACC
 AGCATCCAGTTCAACCTGCGCAACCTCTACCGCCTCTCCAAGGCCCTTCCCGCGGAGCCCTGGTGC
 TGGCAGAGATGTGCAAGCAGGGATACCGGGATGGCTGCGCTTTCTGCAGCGGAACGGCCTCCTGAACCG
 GCCAACCCTTGTGGCGTTGCCCGCCCGCCCGCCACGGCCAGAGGACAAGGACCAGGCGAGTGGAG
 AGCGCCAAGCGGAGGATTACTCGCAGCTGCCGGGAGAAGATCACATCCTGGAGCACCTGCCCGCCGGC
 TCAATGAGGCCCTGTGGAGGCTGCGTGGAGCCACGGACCTGCTGACCACCCTCTCCAACATGCTGCC
 TGTGCGTCTGGCCACGGCCATGATGGTGCCTACACGCTGCCGCTGGAGAGCGCTGTGCTTACCATC
 CGTTGCTGGAGTGGCTGCCGACGTTCCCGAGGACATCCGGTGGATGAAGGAGCAGACGGGAGCATCT
 GCCAGTACCTGGTATGCGCGCCAAGAGGAAGCTGGGCAGGACCTGCCCTCCAGGCTGCCGGAGCAGGT
 GGAGTGCGCCGCGTCCAGTCCGCTGCCGTCGCGTCCGCTGCTGCGCGCCCTACAGAGAGGCATGCC
 GGCTGGATGCGCAACAACCTCTCGCTGGGGACGCGCTGGCCAAGTGGGAGGAGTCCAGCGCCAGCTGC
 TGCTCGGCTCTTCTGCACCAACGTGGCCTTCCCGCCGAAGCTCTGCGCATGCGCGCACCCGCCGACCC
 GGCTCCCGCCCCCGGGACCCAGCATCCCCGAGCACCAGCTGGCCGGGCTGCCCTTGTGAGCACC
 CCTGCTCCGAGGCCCGGCCGCTGATCGGGCCCTGGGGCTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC205708 protein sequence
 Red=Cloning site Green=Tags(s)

MFPREKTWNISFAGCGFLGVYVGVASCLREHAPFLVANATHIYGASAGALTATALVTGVCLGEAGAKFI
 EVSKEARKRFLGPLHPSFNLVKIIRSFLKVLPAJSHEHASGRLGISLTRVSDGENVIIISHFNKDELIIQ
 ANVCSGFIPVYCGLIIPSLQGVRYVDGGISDNLPLYELKNTITVSPFSGESDIPQDSSTNIHELVRTNT
 SIQFNLRNLYRLSKALFPPEPLVLRMCKQGYRDGLRFLQRNGLLNRPNPLLALPPARPHGPEKDKQAVE
 SAQAEDYSQLPGEDHILEHLPARLNEALLEACVEPTDLLTTLNMLPVRLATAMMPYTLPLESALSFTI
 RLLEWLDPVPEDIRWMEQTSICQYLVMAKRKLRHLPSRLPEQVELRRVQSLPSVPLSCAAYREALP
 GWMRNNLSLGDALAKWEECQRQLLLGLFCTNVAFPPEALRMRAPADPAPADPASPQHLAGPAPLLST
 PAPEARPVIGALGL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6176_b05.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_020376

ORF Size: 1512 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_020376.2](#), [NP_065109.1](#)

RefSeq Size: 2443 bp

RefSeq ORF: 1515 bp

Locus ID: 57104

UniProt ID: [Q96AD5](#)

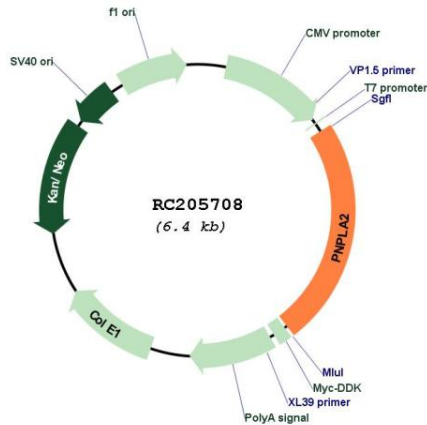
Cytogenetics: 11p15.5

Protein Families: Transmembrane

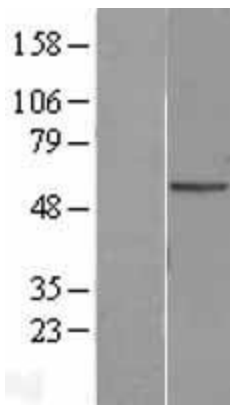
MW: 55.3 kDa

Gene Summary: This gene encodes an enzyme which catalyzes the first step in the hydrolysis of triglycerides in adipose tissue. Mutations in this gene are associated with neutral lipid storage disease with myopathy. [provided by RefSeq, Jul 2010]

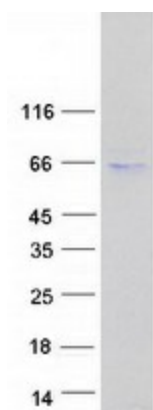
Product images:



Circular map for RC205708



Western blot validation of overexpression lysate (Cat# [LY402777]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC205708 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PNPLA2 protein (Cat# [TP305708]). The protein was produced from HEK293T cells transfected with PNPLA2 cDNA clone (Cat# RC205708) using MegaTran 2.0 (Cat# [TT210002]).