

Product datasheet for **RC201775**

GNPAT (NM_014236) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GNPAT (NM_014236) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GNPAT
Synonyms:	DAP-AT; DAPAT; DHAPAT; RCDP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>RC201775 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGGAGTCTTCCAGTTCATCTAACTCTTATTTCTCCGTTGGCCCAACCAGTCCCAGCGCTGTCGTCTCC
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ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC201775 protein sequence
 Red=Cloning site Green=Tags(s)

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MESSSSNSYFSVGPTSPSAVLLYSKELKKWDEFEDILEERRHVSDLKFAKCYTPLVYKGITPCKPID
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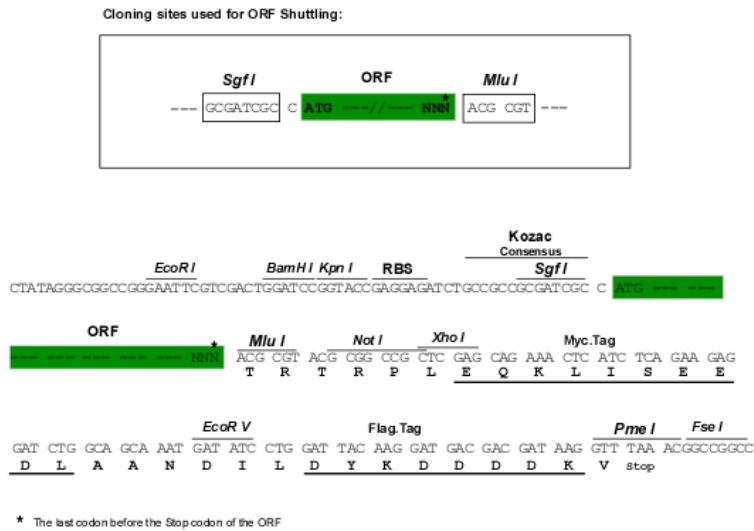
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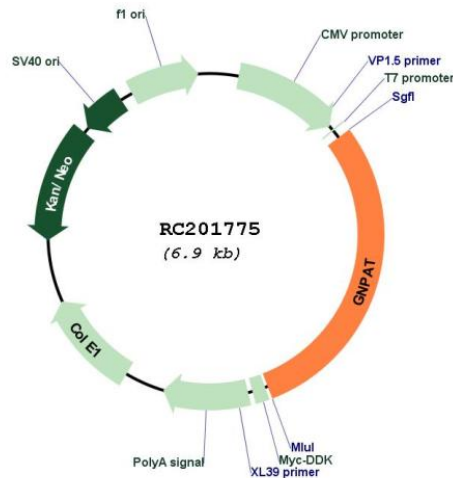
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Restriction Sites:

Sgfl-MluI

Cloning Scheme:


Plasmid Map:



ACCN: NM_014236

ORF Size: 2040 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_014236.4](#)

RefSeq Size: 2687 bp

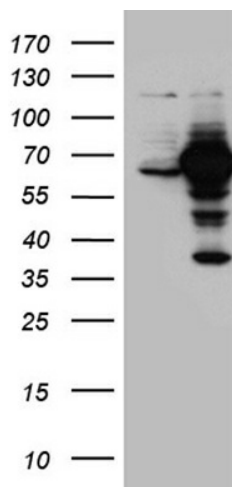
RefSeq ORF: 2043 bp

Locus ID: 8443

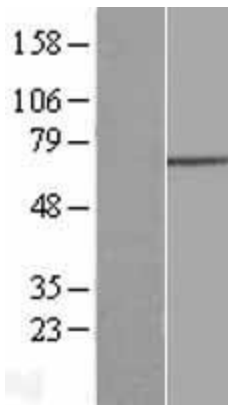
UniProt ID: [O15228](#)
Cytogenetics: 1q42.2
Domains: Acyltransferase
Protein Families: Druggable Genome
Protein Pathways: Glycerophospholipid metabolism
MW: 77.2 kDa

Gene Summary: This gene encodes an enzyme located in the peroxisomal membrane which is essential to the synthesis of ether phospholipids. Mutations in this gene are associated with rhizomelic chondrodysplasia punctata. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2015]

Product images:



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY GNPAT (Cat# RC201775, 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-GNPAT (Cat# [TA811144])(1:2000). Positive lysates [LY402292] (100ug) and [LC402292] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY402292]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC201775 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).