

Product datasheet for **RG201775**

GNPAT (NM_014236) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | GNPAT (NM_014236) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | GNPAT |
| Synonyms: | DAP-AT; DAPAT; DHAPAT; RCDP2 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



[View online »](#)

ORF Nucleotide
Sequence:

>RG201775 representing NM_014236
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGCATCGCC**

ATGGAGTCTTCCAGTTCATCTAACTCTTATTTCTCCGTTGGCCCAACCAGTCCCAGCGCTGTCTGTCTCC
TCTACTCGAAGGAGCTCAAAAAGTGGGATGAGTTTGAAGATATTTTAGAAGAGAGGAGGCATGTCAGTGA
CTTGAAATTTGCAATGAAATGCTACACACCTCTTGCTATAAGGGAATTACTCCATGTAACCAATTGAT
ATTAATGTAGTGTCTCAATTCTGAGGAGATTCATTATGTCATTAACAGCTTTCCAAGGAATCCCTTC
AATCTGTGGATGCTCCGAGAGGAAGTGAAGTGAAGTCTTAGATGAAATGAGTCACAAATGCGTCTTGG
AGCCATTCGGTTTTGTGCCTCACCTGAGCAAAGTATTTAAACAAATTTTCTCGAAGGTGTGTGTAAT
GAAGAAGTATTCAGAACTACAAAGAGCCATCCAGGAGCATCCTGTTGTTCTGTGCCTAGTCATCGAA
GTTACATTGACTTCCTCATGTTGCTTTTCTTCTATAACAATTATGATTTGCCTGTGCCAGTTATAGCAGC
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CGTACCTTTGGTGGCAATAAACTCTACTGGGCTGTATTCTCTGAATATGTAAAACTATGTTACGGAATG
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TGGTCTTCTGAATATTGTGATGGAGCCATTTTTAAAAGAGAAGTTTTGATACCTACCTTGCCCAATT
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AAGAATCTACAACGGGTTGCTGAAAGCCAGAAAGATTCTCTGAAAATTTTGAAGCATCCATGTGTA
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ACATTGCCAGCCTTGCAAGACCAGGTGATTCTGAAAGTGGACTCCGGAGACTCGGAAGTGGTCGATGG
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AGAAGGCTGTACCTGCTTTGAAAAGTGAAGCCATAACAAGTACTACGAAAGACATCCTAGTTACAGAG
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GCAAGCACCTTTGAGTGAAGAAGAGGACCACTTCAGTGAGGAACAGTACTTGGCTGCAGTCAGAAAATT
CACAAGTCAGCTTCTCGATCAAGGTACCTCTCAATGTTATGATGTATTATCTTCTGATGTGCAGAAAAC
GCCTTAGCAGCCTGTGTGAGGCTCGGAGTAGTGGAGAAGAAGAAGATAAATAAATACTGTATATTTAATG
TGAATGAACCTGCCACAACCAAAATTAGAAGAAATGCTTGGTTGTAAGACACCAATAGGAAAACCGCCAC
TGCAAAACTT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG201775 representing NM_014236
 Red=Cloning site Green=Tags(s)

MESSSSNSYFSVGPTSPSAVLLYSKELKKWDEFEDILEERRHVSDLKFAMKCYTPLVYKGITPCKPID
 IKCSVLNSEEIHVYIKQLSKESLQSDVLRREEVSEILDEMSHKLRGAI RFCAFTLSKVFKQIFSKVCVN
 EEGIQKLQRAIQEHPVLLPSHRSYIDFLMLSFLLYNYDLPVPVIAAGMDFLGMKMGELLRMSGAFFMR
 RTFGGNKLYWAVFSEYVKTMLRNGYAPVEFFLEGTRSRSAKTLTPKFGLLNIVMEPFFKREVFDTYLVI
 SISYDKILEETLYVYELLGVPKPESTTGLLKARKILSENFSGSIHVYFGDPVSLRSLAAGRMSRSSYNLV
 PRYIPQKQSEDMHAFVTEVAYKMELLQIENMVLSPWTLIVAVLLQNRPSMDFDALVEKTLWLKGLTQAFG
 GFLIWPDNKPAEEVVPASILLHSNIASLVKDQVILKVDSGDSEVVDGLMLQHITLLMCSAYRNQLLNIFV
 RPSLVAVALQMTPGFRKEDVYSCFRFLRDVFADEFIFLPGNTLKDFFEEGCYLLCKSEAIQVTTKIDILVTE
 KGNTVLEFLVGLFKPFVESYQIICKHLLSEEEDHFSEEQYLA AVRKFTSQLLDQGT SQCYDVLSSDVQKN
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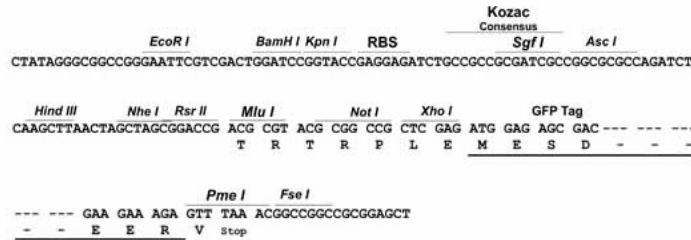
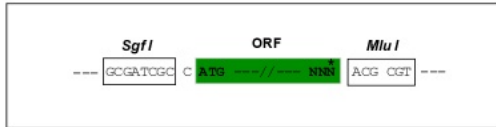
TRTRPLE - GFP Tag - V

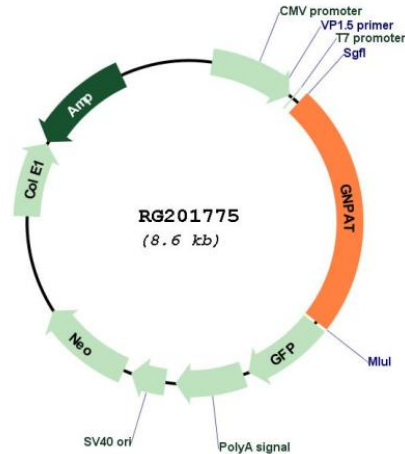
Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



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_014236.2](#), [NP_055051.1](#)

RefSeq Size: 2431 bp

| | |
|-------------------|--|
| RefSeq ORF: | 2043 bp |
| Locus ID: | 8443 |
| UniProt ID: | O15228 |
| Cytogenetics: | 1q42.2 |
| Domains: | Acyltransferase |
| Protein Families: | Druggable Genome |
| Protein Pathways: | Glycerophospholipid metabolism |
| 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] |