

## Product datasheet for **RG203054**

### PTPLA (HACD1) (NM\_014241) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PTPLA (HACD1) (NM_014241) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PTPLA
Synonyms:	CAP; PTPLA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG203054 representing NM_014241 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGGGCGCCTGACGGAAGCGGGCAGCGGGCAGCGGCTCTCGGGCTGCAGGCTGGCAGGGTCCCCTC  
CCACGCTCCTGCCGTGTCTCCACGTCCCCAGGTGCGCGGCCACCATGGCGTCCAGCGACGAGGACGG  
CACCAACGGCGGCCTCGGAGGCCGGCAGGACCGGGAGGCTCCCGCAAGCGGAGGCGCCTGGGGTTC  
TTGGCCACCGCCTGGCTCACCTTCTACGACATCGCCATGACCGCGGGTGGTTGGTTCTAGCTATTGCCA  
TGGTACGTTTTTATATGAAAAAGGAACACACAGAGGTTTATATAAAAGTATTCAGAAGACACTAAATT  
TTTCCAGACATTTGCCTTGCTTGAGATAGTTCACTGTTTAATTGGAATTGTACCTACTTCTGTGATTGTG  
ACTGGGTCCAAGTGAGTTCAAGAATCTTTATGGTGTGGCTCATTACTCACAGTATAAAACCAATCCAGA  
ATGAAGAGAGTGTGGTGTCTTTCTGGTCGCGTGGACTGTGACAGAGATCACTCGCTATTCTTCTACAC  
ATTCAGCCTTCTTGACCACTTGCCATACTTCATTAATGGGCCAGATATAATTTTTTATCATCTTATAT  
CCTGTTGGAGTTGCTGGTGAACCTTCTTACAATATACGCTGCCTTGCCGCATGTGAAGAAAACAGGAATGT  
TTCAATAAGACTTCCTAACAAATACAATGTCTCTTTTGACTACTATTATTTCTTCTTATAACCATGGC  
ATCATATACCTTTGTTTCCACAACCTATTTTCATATGTTACGTCAAAGAAGAAAGGTGCTTCATGGA  
GAGGTGATTGTAGAAAAGGATGAT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG203054 representing NM\_014241  
 Red=Cloning site Green=Tags(s)

MGRLTEAAAAGSGSRAAGWAGSPPTLLPLSPTSPRCAATMASSDEDTNGGASEAGEDREAPGKRRRLGF  
 LATAWLTFYDIAMTAGWLVLAIAMVRFYMEKGTNRGLYKSIQKTLKFFQTFALLEIVHCLIGIVPTSVIV  
 TGVQVSSRIFMVWLITHSIKPIQNEESVVLFLVAWTVTEITRYSFYTFSLLDHLPYFIKWARYNFFIILY  
 PVGVAGELLTIYAALPHVKKTGFMFSIRLPNKYNVVSFDYYYFLLITMASYIPLFPQLYFHMLRQRRKVLHG  
 EVIVEKDD

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_014241

**ORF Size:** 864 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\\_014241.2](#), [NP\\_055056.2](#)

**RefSeq Size:** 1026 bp

**RefSeq ORF:** 867 bp

**Locus ID:** 9200

**UniProt ID:** [B0YJ81](#)

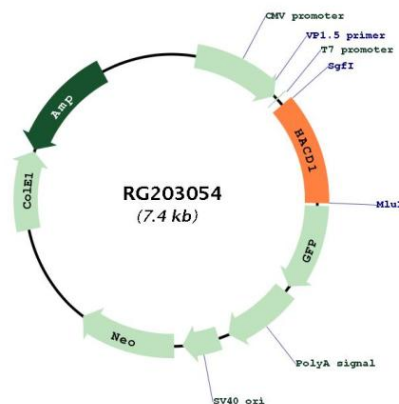
**Cytogenetics:** 10p12.33

**Protein Families:** Druggable Genome, Phosphatase, Transmembrane

**Protein Pathways:** Biosynthesis of unsaturated fatty acids

**Gene Summary:** The protein encoded by this gene contains a characteristic catalytic motif of the protein tyrosine phosphatases (PTPs) family. The PTP motif of this protein has the highly conserved arginine residue replaced by a proline residue; thus it may represent a distinct class of PTPs. Members of the PTP family are known to be signaling molecules that regulate a variety of cellular processes. This gene was preferentially expressed in both adult and fetal heart. A much lower expression level was detected in skeletal and smooth muscle tissues, and no expression was observed in other tissues. The tissue specific expression in the developing and adult heart suggests a role in regulating cardiac development and differentiation. [provided by RefSeq, Jul 2008]

## Product images:



Circular map for RG203054