

Product datasheet for **RG220032**

PTPD1 (PTPN21) (NM_007039) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PTPD1 (PTPN21) (NM_007039) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PTPN21
Synonyms:	PTPD1; PTPRL10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG220032 representing NM_007039 Red=Cloning site Blue=ORF Green=Tags(s)

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GCC**CGATCGCC**

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TACAGCCAGCCCAGATCCGCGAGCACGACAGCTCCCCTCGCCAGCGGCCGCACACTGCCCGTTCAGCC
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GGCAACAGAGAATGATGCTGGTGCAGACTCTGCCAGTACACATTTGTGTACAGAGTCTCATCCAGTT
CCTGAAAAGCTCCAGGCTCATC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG220032 representing NM_007039
 Red=Cloning site Green=Tags(s)

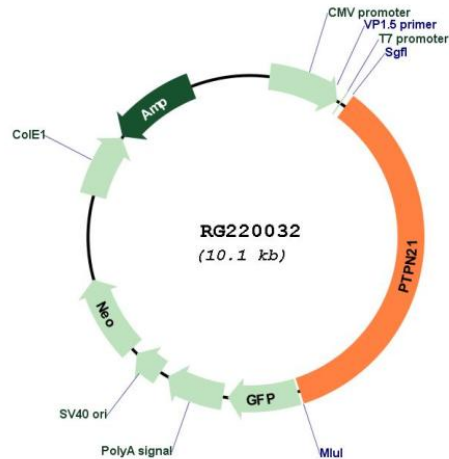
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 SEIMIACLEHNEVLDIPRVLDMLRQQRMLLVQTLQYTFVYRVL IQFLKSSRLI

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI
 Cloning Scheme:



Plasmid Map:



ACCN: NM_007039

ORF Size: 3522 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_007039.4](#)

RefSeq Size: 4234 bp

RefSeq ORF: 3525 bp

Locus ID: 11099

UniProt ID: [Q16825](#)

Cytogenetics: 14q31.3

Domains:	Y_phosphatase, B41, PTPc_motif
Protein Families:	Druggable Genome, Phosphatase
Gene Summary:	<p>The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP contains an N-terminal domain, similar to cytoskeletal-associated proteins including band 4.1, ezrin, merlin, and radixin. This PTP was shown to specially interact with BMX/ETK, a member of Tec tyrosine kinase family characterized by a multimodular structures including PH, SH3, and SH2 domains. The interaction of this PTP with BMX kinase was found to increase the activation of STAT3, but not STAT2 kinase. Studies of the similar gene in mice suggested the possible roles of this PTP in liver regeneration and spermatogenesis. [provided by RefSeq, Jul 2008]</p>