

## Product datasheet for RC220032

### 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:	Myc-DDK
Symbol:	PTPD1
Synonyms:	PTPD1; PTPRL10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC220032 representing NM_007039 Red=Cloning site Blue=ORF Green=Tags(s)

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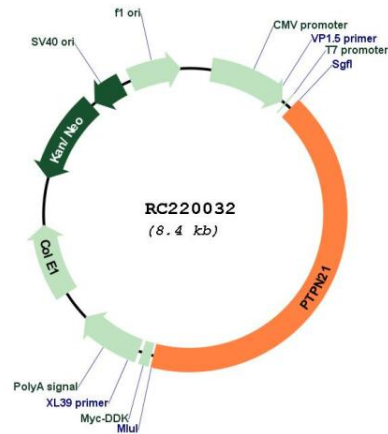
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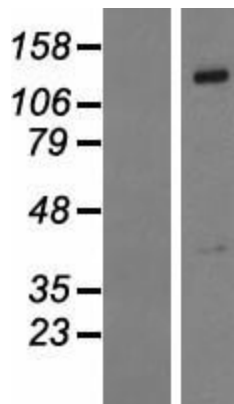


<b>OTI Disclaimer:</b>	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_007039.4</a>
<b>RefSeq Size:</b>	4234 bp
<b>RefSeq ORF:</b>	3525 bp
<b>Locus ID:</b>	11099
<b>UniProt ID:</b>	<a href="#">Q16825</a>
<b>Cytogenetics:</b>	14q31.3
<b>Domains:</b>	Y_phosphatase, B41, PTPc_motif
<b>Protein Families:</b>	Druggable Genome, Phosphatase
<b>MW:</b>	133.1 kDa
<b>Gene Summary:</b>	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]

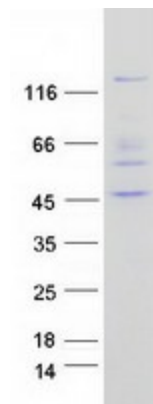
Product images:



Circular map for RC220032



Western blot validation of overexpression lysate (Cat# [LY416238]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC220032 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PTPN21 protein (Cat# [TP320032]). The protein was produced from HEK293T cells transfected with PTPN21 cDNA clone (Cat# RC220032) using MegaTran 2.0 (Cat# [TT210002]).