

Product datasheet for **RC226074**

PTPN12 (NM_001131008) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PTPN12 (NM_001131008) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PTPN12
Synonyms:	PTP-PEST; PTPG1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide
Sequence:

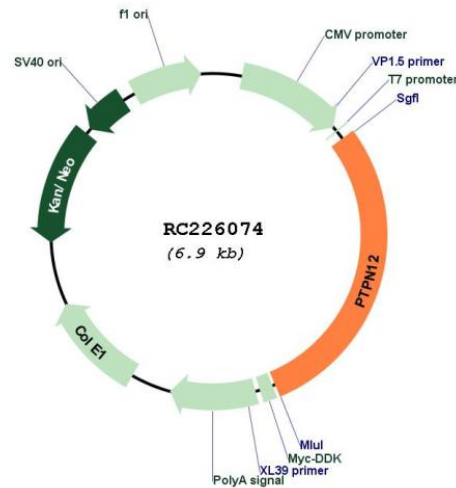
>RC226074 representing NM_001131008
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGATATGGGAGTATAATGTTGTGATCATTGTAATGGCCTGCCGAGAATTTGAGATGGGAAGGAAAAAT
GTGAGCGCTATTGGCCTTTGTATGGAGAAGACCCATAACGTTTGCACCATTTAAAATTTCTTGTGAGGA
TGAACAAGCAAGAACAGACTACTTCATCAGGACTCTTACTTGAATTTCAAATGAATCTCGTAGGCTG
TATCAGTTTCATTATGTGAAGTGGCCAGACCATGATGTTCTTCATCATTGATTCTATTCTGGACATGA
TAAGCTTAATGAGGAAATATCAAGAACATGAAGATGTTCTATTTGATTTCATTGCAGTGCAGGCTGTGG
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TTTAATGTATTTAATTAACAAGAAATGAGAACACAAAGGCATTCTGCAGTACAAACAAAGGAGCAAT
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TCAGAAAATTGCTGATGGAGTGAATGAAATTAACACTGAAAACATGGTCAGCTCCATAGAGCCTGAAAA
CAAGATTCCTCCTCCTCCAAAACCAAGGACCCGCAGTTGCCTTGTGAAGGGGATGCTAAAGAAGAAA
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GAAAGAACTCTGATGGTGTGTGACCCAGAATAAACTAATATTTCAACAGCAAGTCCACAGTTTCTG
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ATATCAGAAAATCCAACAGAAGCCACAGATATTGGTTTTGGTAATCGATGTGAAAAACCAAGGACCAA
GAGATCCACCTTCAGAATGGACA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Plasmid Map:



ACCN: NM_001131008

ORF Size: 1983 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_001131008.2](#)

RefSeq Size:	3122 bp
RefSeq ORF:	1986 bp
Locus ID:	5782
UniProt ID:	Q05209
Cytogenetics:	7q11.23
Protein Families:	Druggable Genome, Phosphatase
MW:	74.1 kDa

Gene Summary: The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. PTPs are signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP contains a C-terminal PEST motif, which serves as a protein-protein interaction domain, and may regulate protein intracellular half-life. This PTP was found to bind and dephosphorylate the product of the oncogene c-ABL and thus may play a role in oncogenesis. This PTP was also shown to interact with, and dephosphorylate, various products related to cytoskeletal structure and cell adhesion, such as p130 (Cas), CAKbeta/PTK2B, PSTPIP1, and paxillin. This suggests it has a regulatory role in controlling cell shape and mobility. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Oct 2008]