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# Product datasheet for RC213476

## PTPN18 (NM_014369) Human Tagged ORF Clone

### Product data:

| | |
|---|---|
| **Product Type:** | Expression Plasmids |
| **Product Name:** | PTPN18 (NM_014369) Human Tagged ORF Clone |
| **Tag:** | Myc-DDK |
| **Symbol:** | PTPN18 |
| **Synonyms:** | BDP1; PTP-HSCF |
| **Mammalian Cell Selection:** | Neomycin |
| **Vector:** | pCMV6-Entry (PS100001) |
| **E. coli Selection:** | Kanamycin (25 ug/mL) |

**ORF Nucleotide Sequence:**

>RC213476 representing NM_014369
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGCCGCAGCCTGGACTCGGCGCGGAGCTTCCTGGAGCGGCTGGAAGCGCGGGGCGGCCGGGAGGGGG
CAGTCCTCGCCGGCGAGTTCAGCGACATCCAGGCCTGCTCGGCCGCCTGGAAGGCTGACGGCGTGTGCTC
CACCGTGGCCGGCAGTCGGCCAGAGAACGTGAGGAAGAACCGCTACAAAGACGTGCTGCCTTATGATCAG
ACGCGAGTAATCCTCTCCCTGCTCCAGGAAGAGGGACACAGCGACTACATTAATGGCAACTTCATCCGGG
GCGTGGATGGAAGCCTGGCCTACATTGCCACGCAAGGACCCTTGCCTCACACCCTGCTAGACTTCTGGAG
ACTGGTCTGGGAGTTTGGGGTCAAGGTGATCCTGATGGCCTGTCGAGAGATAGAGAATGGGCGGAAAAGG
TGTGAGCGGTACTGGGCCCAGGAGCAGGAGCCACTGCAGACTGGGCTTTTCTGCATCACTCTGATAAAGG
AGAAGTGGCTGAATGAGGACATCATGCTCAGGACCCTCAAGGTCACATTCCAGAAGGAGTCCCGTTCTGT
GTACCAGCTACAGTATATGTCCTGGCCAGACCGTGGGGTCCCCAGCAGTCCTGACCACATGCTCGCCATG
GTGGAGGAAGCCCGTCGCCTCCAGGGATCTGGCCCTGAACCCCTCTGTGTCCACTGCAGTGCGGGTTGTG
GGCGAACAGGCGTCCTGTGCACCGTGGATTATGTGAGGCAGCTGCTCCTGACCCAGATGATCCCACCTGA
CTTCAGTCTCTTTGATGTGGTCCTTAAGATGAGGAAGCAGCGGCCTGCGGCCGTGCAGACAGAGGAGCAG
TACAGGTTCCTGTACCACACGGTGGCTCAGATGTTCTGCTCCACACTCCAGAATGCCAGCCCCCACTACC
AGAACATCAAAGAGAATTGTGCCCCACTCTACGACGATGCCCTCTTCCTCCGGACTCCCCAGGCACTTCT
CGCCATACCCCGCCCACCAGGAGGGGTCCTCAGGAGCATCTCTGTGCCCGGGTCCCCGGGCCACGCCATG
GCTGACACCTACGCGGTGGTGCAGAAGCGCGGGGCTCCAGCGGGCGCCGGGAGTGGGACGCAGACGGGGA
CGGGGACGGGGACGGGGGCGCGCAGCGCGGAGGAGGCGCCGCTCTACAGCAAGGTGACGCCGCGCGCCCA
GCGACCCGGGGCGCACGCGGAGGACGCGAGGGGGACGCTGCCTGGCCGCGTTCCTGCTGACCAAAGTCCT
GCCGGATCTGGCGCCTACGAGGACGTGGCGGGTGGAGCTCAGACCGGTGGGCTAGGTTTCAACCTGCGCA
TTGGGAGGCCGAAGGGTCCCCGGGACCCGCCTGCTGAGTGGACCCGGGTG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

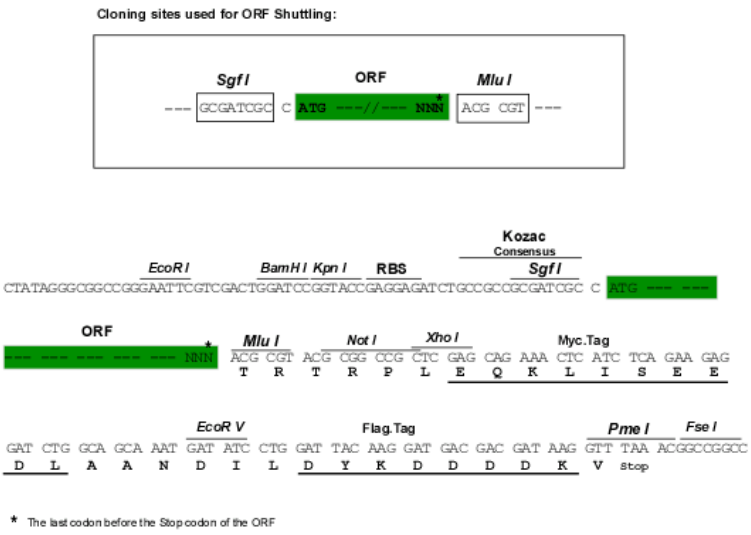
>RC213476 representing NM_014369
Red=Cloning site Green=Tags(s)

MSRSLDSARSFLERLEARGGREGAVLAGEFSDIQACSAAWKADGVCSTVAGSRPENVRKNRYKDVLPYDQ
TRVILSLLQEEGHSDYINGNFIRGVDGSLAYIATQGPLPHTLLDFWRLVWEFGVKVILMACREIENGRKR
CERYWAQEQEPLQTGLFCITLIKEKWLNEDIMLRTLKVTFQKESRSVYQLQYMSWPDRGVPSSPDHMLAM
VEEARRLQGSGPEPLCVHCSAGCGRTGVLCTVDYVRQLLLTQMIPPDFSLFDVVLKMRKQRPAAVQTEEQ
YRFLYHTVAQMFCSTLQNASPHYQNIKENCAPLYDDALFLRTPQALLAIPRPPGGVLRSISVPGSPGHAM
ADTYAVVQKRGAPAGAGSGTQTGTGTGTGARSAEEAPLYSKVTPRAQRPGAHAEDARGTLPGRVPADQSP
AGSGAYEDVAGGAQTGGLGFNLRIGRPKGPRDPPAEWTRV

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**




**ACCN:** NM_014369

**ORF Size:** 1380 bp

**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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

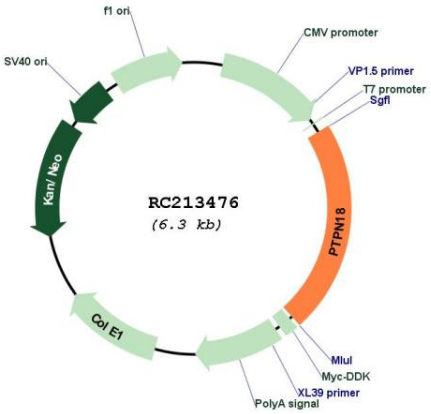
**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**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).

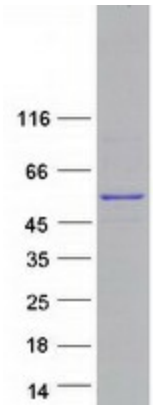
**Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid 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_014369.4 |
| **RefSeq Size:** | 2837 bp |
| **RefSeq ORF:** | 1383 bp |
| **Locus ID:** | 26469 |
| **UniProt ID:** | Q99952 |
| **Cytogenetics:** | 2q21.1 |
| **Domains:** | Y_phosphatase, PTPc_motif |
| **Protein Families:** | Druggable Genome, Phosphatase |
| **MW:** | 50.3 kDa |
| **Gene Summary:** | 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, the mitotic cycle, and oncogenic transformation. This PTP contains a PEST motif, which often serves as a protein-protein interaction domain, and may be related to protein intracellular half-live. This protein can differentially dephosphorylate autophosphorylated tyrosine kinases that are overexpressed in tumor tissues, and it appears to regulate HER2, a member of the epidermal growth factor receptor family of receptor tyrosine kinases. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Nov 2008] |

## Product images:




Circular map for RC213476




Coomassie blue staining of purified PTPN18 protein (Cat# [TP313476]). The protein was produced from HEK293T cells transfected with PTPN18 cDNA clone (Cat# RC213476) using MegaTran 2.0 (Cat# [TT210002]).