

Product datasheet for **MG227012**

Ptpn1 (NM_011201) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Ptpn1 (NM_011201) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Ptpn1
Synonyms:	PTP-1B; PTP-HA2; PTP1B
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG227012 representing NM_011201 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGATGGAGAAGGAGTTCGAGGAGATCGACAAGGCTGGGAAGTGGCGGCTATTTACCAGGACATTC
GACATGAAGCCAGCGACTTCCCATGCAAAGTCGCGAAGCTTCCTAAGAACAAAACCGGAACAGGTACCG
AGATGTCAGCCCTTTTGACCACAGTCGGATTAATTCACCAAGGAAGATAATGACTATATCAATGCCAGC
TTGATAAAAATGGAAGAAGCCCAGAGGAGCTATATTCTACCCAGGGCCCTTTACCAAACACATGTGGGC
ACTTCTGGGAGATGGTGTGGGAGCAGAAGAGCAGGGGCGTGGTCATGCTCAACCGCATCATGGAGAAAGG
CTCGTTAAAATGTGCCAGTATTGGCCACAGCAAGAAGAAAAGGAGATGGTCTTTGATGACACAGTTTG
AAGTTGACACTAATCTCTGAAGATGTCAAGTCATATTACACAGTACGACAGTTGGAGTTGAAAAACCTGA
CTACCAAGGAGACTCGAGAGATCCTGCATTTCCACTACACCACATGGCCTGACTTTGGAGTCCCCGAGTC
ACCGGCTTCTTTCCTCAATTTCTTTTCAAAGTCCGAGAGTCAGGCTCACTCAGCCTGGAGCATGGCCCC
ATTGTGGTCCACTGCAGCGCCGGCATCGGGAGGTCAGGGACCTTCTGTCTGGCTGACACCTGCCTTTAC
TGATGGACAAGAGGAAAGACCCATCTTCCGTGGACATCAAGAAAGTACTGCTGGAGATGCGCAGGTTCCG
CATGGGGCTCATCCAGACTGCCGACCAGCTGCGCTTCTCTACCTGGCTGTCATCGAGGGCGCCAAGTTC
ATCATGGGCGACTCGTCAGTGCAGGATCAGTGGAAGGAGCTCTCCGGGAGGATCTAGACCTTCCACCCG
AGCAGTGCCCCCACCTCCCCGGCCACCCAAACGCACACTGGAGCCTCACAACGGGAAGTCAAGGAGCT
CTTCTCCAGCCACCAAGTGGGTGAGCGAGGAGACCTGTGGGGATGAAGACAGCCTGGCCAGAGAGGAAGGC
AGAGCCCAGTCAAGTGCCATGCACAGCGTGAGCAGCATGAGTCCAGACACTGAAGTTAGGAGACGGATGG
TGGGTGGAGGTCTTCAAAGTGCTCAGGCGTCTGTCCCCACCGAGGAAGAGCTGTCCTCCACTGAGGAGGA
ACACAAGGCACATTGGCCAAGTCACTGGAAGCCCTTCTGGTCAATGTGTGCATGGCCACGCTCCTGGCC
ACCGGCGCTACTTGTGTACCGGGTGTGTTTTAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA


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Protein Sequence: >MG227012 representing NM_011201
 Red=Cloning site Green=Tags(s)

MEMEKEFEEIDKAGNWAAIYQDIRHEASDFPCKVAKLPKNKNRNRVSPFDHSRIKLHQEDNDYINAS
 LIKMEEAQRSYILTQGPLNNTCGHFWEMVWEQKSRGVVMLNRIMEKGLKCAQYWPQEEKEMVDDTGL
 KLTLISEDVKSYYTVRQLELENLTTKETREILHFHYTTWPDFGVPEPASFLNFLFKVRESGSLSLHGP
 IVVHCSAGIGRSGTFCLADTCLLLMDKRKDPSSVDIKVLLMRRFRMGLIQTADQLRFSYLAVIEGAKF
 IMGDSSVQDQWELSLREDLDLPPEHVPPPPRPPKRTLEPHNGKCKELFSSHQWVSEETCGDEDSLAREEG
 RAQSSAMHSVSSMSPDTEVRRRMVGGGLQSAQASVPTTEELSTEEHKAHWP SHWKPFLVNVCMATLLA
 TGAYLCYRVCFH

TRTRPLE – GFP Tag – V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_011201

ORF Size: 1296 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_011201.3](#), [NP_035331.3](#)

RefSeq Size: 4213 bp

RefSeq ORF: 1299 bp

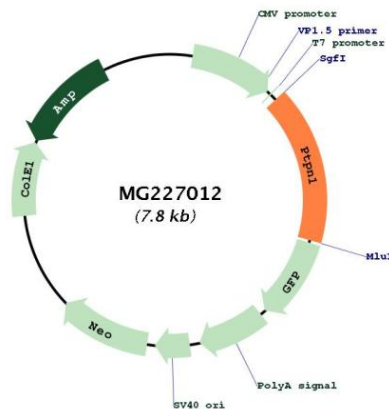
Locus ID: 19246

UniProt ID: [P35821](#)

Cytogenetics: 2 H3

Gene Summary: Tyrosine-protein phosphatase which acts as a regulator of endoplasmic reticulum unfolded protein response. Mediates dephosphorylation of EIF2AK3/PERK; inactivating the protein kinase activity of EIF2AK3/PERK. May play an important role in CKII- and p60c-src-induced signal transduction cascades. May regulate the EFNA5-EPHA3 signaling pathway which modulates cell reorganization and cell-cell repulsion. May also regulate the hepatocyte growth factor receptor signaling pathway through dephosphorylation of MET (By similarity). [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG227012