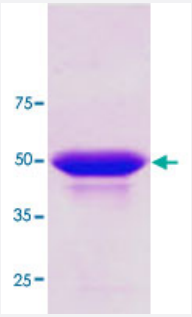
Bioactive Full-Length

# PPM1A (Human) Recombinant Protein

Catalog # P3446 Size 100 ug

## Applications




## Specification

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| **Product Description** | Human PPM1A (NP_066283, 1 a.a. - 382 a.a.) full-length recombinant protein expressed in *Escherichia coli*. |
| **Sequence** | MRGSHHHHHHGMASMTGGQQMGRDLYDDDDKDRWILMGAFLDKPKMEKHNAQGQGNGLRYG LSSMQGWRVEMEDAHTAVIGLPSGLESWSFFAVYDGHAGSQVAKYCCEHLLDHITNNQDFKGS AGAPSVENVKNGIRTGFLEIDEHMRVMSEKKHGADRSGSTAVGVLISPQHTYFINCGDSRGLLCR NRKVHFFTQDHKPSNPLEKERIQNAGGSVMIQRVNGSLAVSRALGDFDYKCVHGKGPTEQLVSP EPEVHDIERSEEDDQFIILACDGIWDVMGNEELCDFVRSRLEVTDDLEKVCNEVVDTCLYKGSRD NMSVILICFPNAPKVSPEAVKKEAELDKYLECRVEEIIKKQGEGVPDLVHVMRTLASENIPSLPPG GELASKRNVIEAVYNRLNPYKNDDTDSTSTDDMW |
| **Host** | Escherichia coli |
| **Theoretical MW (kDa)** | 46.6 |
| **Form** | Liquid |
| **Preparation Method** | *Escherichia coli* expression system |
| **Purification** | Conventional Chromatography |
| **Concentration** | 1 mg/mL |
| **Purity** | > 95% by SDS-PAGE |

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| **Endotoxin Level** | < 1.0 EU per 1 microgram of protein (determined by LAL method) |
| **Activity** | >8,000 units/mg of PP2C alpha |
| **Quality Control Testing** | Loading 3 ug protein in 10% SDS-PAGE |
| **Storage Buffer** | In 10 mM Tris-HCl, 50 mM NaCl, 1 mM MnCl2, pH 7.5 (2 mM DTT, 20%glycerol). |
| **Storage Instruction** | Store at 2°C to 8°C for 1 week. For long term storage, aliquot and store at -20°C to -80°C. Aliquot to avoid repeated freezing and thawing. |

## Applications

- Functional Study
- SDS-PAGE

## Gene Info — PPM1A

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|---|---|
| **Entrez GeneID** | 5494 |
| **Protein Accession#** | NP_066283 |
| **Gene Name** | PPM1A |
| **Gene Alias** | FLJ42306, MGC9201, PP2C-ALPHA, PP2CA |
| **Gene Description** | protein phosphatase 1A (formerly 2C), magnesium-dependent, alpha isoform |
| **Omim ID** | 606108 |
| **Gene Ontology** | Hyperlink |
| **Gene Summary** | The protein encoded by this gene is a member of the PP2C family of Ser/Thr protein phosphatases. PP2C family members are known to be negative regulators of cell stress response pathways. This phosphatase dephosphorylates, and negatively regulates the activities of, MAP kinases and MAP kinase kinases. It has been shown to inhibit the activation of p38 and JNK kinase cascades induced by environmental stresses. This phosphatase can also dephosphorylate cyclin-dependent kinases, and thus may be involved in cell cycle control. Overexpression of this phosphatase is reported to activate the expression of the tumor suppressor gene TP53/p53, which leads to G2/M cell cycle arrest and apoptosis. Three alternatively spliced transcript variants encoding distinct isoforms have been described. [provided by RefSeq |
| **Other Designations** | protein phosphatase 1A\|protein phosphatase 2C alpha isoform |

## Pathway

- MAPK signaling pathway

## Disease

- Tobacco Use Disorder