

# Product datasheet for SA6016X

### OriGene Technologies, Inc.

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## Protein phosphatase 1A / PPM1A (1-382, His-tag) Human Protein

#### **Product data:**

**Product Type: Recombinant Proteins** 

**Description:** Protein phosphatase 1A / PPM1A (1-382, His-tag) human protein, 0.5 mg

Species: Human **Expression Host:** E. coli

**Expression cDNA Clone** 

MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDRWILMGAF LDKPKMEKHN AQGQGNGLRY or AA Sequence: GLSSMQGWRV EMEDAHTAVI GLPSGLESWS FFAVYDGHAG SQVAKYCCEH LLDHITNNQD

FKGSAGAPSV ENVKNGIRTG FLEIDEHMRV MSEKKHGADR SGSTAVGVLI SPQHTYFINC GDSRGLLCRN RKVHFFTQDH KPSNPLEKER IQNAGGSVMI QRVNGSLAVS RALGDFDYKC VHGKGPTEQL VSPEPEVHDI ERSEEDDQFI ILACDGIWDV MGNEELCDFV RSRLEVTDDL EKVCNEVVDT CLYKGSRDNM SVILICFPNA PKVSPEAVKK EAELDKYLEC RVEEIIKKQG

EGVPDLVHVM RTLASENIPS LPPGGELASK RNVIEAVYNR LNPYKNDDTD STSTDDMW

Tag: His-tag Predicted MW: 46.6 kDa Concentration: lot specific

>95% by SDS-PAGE **Purity:** 

**Buffer:** Presentation State: Purified

State: Liquid purified protein

Buffer System: 10 mM Tris-HCl, pH 7.5, 50 mM NaCl, 2 mM DTT, 1 mM MnCl2, 20% glycerol

Specific: Specific activity is > 1,400 units/mg, and is defined as the amount of enzyme that **Bioactivity:** 

hydrolyze 1.0 nmoles of p-nitrophenyl phosphate (pNPP) per minute at pH 7.5 at 37°C.

**Endotoxin:** < 1.0 EU per 1 µg of protein (determined by LAL method)

Preparation: Liquid purified protein

**Protein Description:** The protein coding region of PP2Cα (amino acids 1-382) was cloned into an E. coli expression

vector (BamHI/HindШ site). PP2Cα was overexpressed in E. coli as a soluble His-tag fusion

protein, and it was purified by conventional column chromatographic techniques.

Storage: Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer.

Avoid repeated freezing and thawing.

Stability: Shelf life: one year from despatch.



### Protein phosphatase 1A / PPM1A (1-382, His-tag) Human Protein – SA6016X

**RefSeq:** NP 066283

**Locus ID:** 5494

UniProt ID: <u>P35813</u>, <u>A0A024R6A5</u>

Cytogenetics: 14q23.1

Synonyms: PP2C-ALPHA; PP2CA; PP2Calpha

Summary: The protein encoded by this gene is a member of the PP2C family of Ser/Thr protein

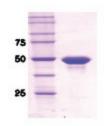
phosphatases. PP2C family members are known to be negative regulators of cell stress response pathways. This phosphatase dephosphorylates, and negatively regulates the activities of, MAP kinases and MAP kinases. It has been shown to inhibit the activation of p38 and JNK kinase cascades induced by environmental 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, Jul 2008]

**Protein Families:** Druggable Genome, Phosphatase

**Protein Pathways:** MAPK signaling pathway

## **Product images:**



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