

Human Recombinant PP2C alpha

CATALOG #:	6303-100	100 µg
ALTERNATE NAMES:	Protein phosphatase 1A (formerly 2C), magnesium-dependent, alpha isoform, PPM1A, PP2CA, PP2C-ALPHA.	
SOURCE:	E.Coli	
PURITY:	> 95% by SDS - PAGE	
MOL. WEIGHT:	46.6 kDa (418aa), confirmed by MALDI-TOF	
ENDOTOXIN LEVEL:	< 1.0 EU per 1 µg of protein (determined by LAL method)	
FORMULATION:	1 mg/ml solution in 10 mM Tris-HCl, pH 7.5, 50 mM NaCl, 2 mM DTT, 1 mM MnCl ₂ , 20% glycerol.	

STORAGE CONDITIONS:

Can be stored at 4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.

DESCRIPTION:

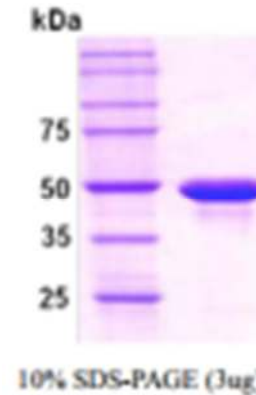
Protein phosphatase 2C (PP2C alpha) is a Mn²⁺- or Mg²⁺- dependent protein serine/threonine phosphatase that is essential for regulating cellular stress response in eukaryotes. The protein coding region of PP2C alpha (amino acids 1-382) was cloned into an E. coli expression vector. PP2C alpha was overexpressed in E. coli as a soluble His-tag fusion protein, and it was purified by conventional column chromatographic techniques.

AMINO ACID SEQUENCE:

MRGSHHHHHH GMASMTGGQQ MGRDLYDDDD KDRWIL FFAVYDGHAG SQVAKYCCEH
LLDHITNNQD FKGSAGAPSV ENVKNGIRTG FLEIDEHMRV MSEKKHGADR SGSTAVGVLI
SPQHTYFINC MGAF LDKPKMEKHN AQQQGNGRLY GLSSMQGWRV EMEDAHTAVI
GLPSGLESWS GDSRGLLCRN RKVHFFTQDH KPSNPLEKER IQNAGGSVMI
QRVNGSLAVS RALGDFDYKC VHGKGPTEQL VSPEPEVHDI ERSEEDDQFI ILACDGIWDV
MGNEELCDFV RSRLEVTDDL EKVCNEVVDV CLYKGSRDNM SVILICFPNA PKVSPEAVKK
EAELDKYLEC RVEEIIKKQG EGVPLVHVM RTLASENIPS LPPGGELASK RNVIEAVYNR
LNPYKNDTDD STSTDDMW

BIOLOGICAL ACTIVITY:

>8,000 units/mg. Enzymatic activity was confirmed by measuring the amount of enzyme hydrolyzing 1 nmole of p-nitrophenyl phosphate (pNPP) per minute at 37°C, pH 7.5 using 10 mM of substrate.



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FOR RESEARCH USE ONLY! Not to be used in humans.

RELATED PRODUCTS:

- bpV(phen) (Cat. No. 1793-5)
- bpV(pic) (Cat. No. 1794-5)
- PTP1B Antibody (Cat. No. 3171-100)
- PTP1B Antibody (Cat. No. 3174-100)
- PTP1B Antibody (Clone 107AT531) (Cat. No. 3122-100)
- Phosphoseek™ PTP1B Assay kit (Cat. No. K707-400)