

Datasheet for ABIN3086448

## PPM1D Protein (AA 1-605) (Strep Tag)



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### Overview

Quantity:	250 µg
Target:	PPM1D
Protein Characteristics:	AA 1-605
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PPM1D protein is labelled with Strep Tag.
Application:	SDS-PAGE (SDS), ELISA, Western Blotting (WB)

### Product Details

Brand:	AliCE®
Sequence:	<p>MAGLYSLGVS VFSDQGGRKY MEDVTQIVVE PEPTAEEKPS PRRSLSQPLP PRPSAALPG</p> <p>GEVSGKGPAV AAREARDPLP DAGASPAPSR CCRRRSSVAF FAVCDGHGGR EAAQFAREHL</p> <p>WGFIKKQKGF TSSEPAKVCA AIRKGFLACH LAMWKKLAEW PKTMTGLPST SGTTASVII</p> <p>RGMKMYVAHV GDSGVVLGIQ DDPKDDFVRA VEVTDQHKPE LPKERERIEG LGGSVMNKS</p> <p>VNRVWVKRPR LTHNGPVRRS TVIDQIPFLA VARALGDLWS YDFFSGEFVV SPEPDTSVHT</p> <p>LDPQKHKYII LGSDGLWNMI PPQDAISM CQ DQEEKKYL MG EHGQSCAKML VNRALGRWRQ</p> <p>RMLRADNTSA IVICISPEVD NQGNFTNEDE LYLNLTDS PS YNSQETCVMT PSCSTPPVK</p> <p>SLEEDPWPRV NSKDHIPALV RSNAFSENFL EVSAEIAREN VQGVVIPS KD PEPLEENCAK</p> <p>ALTLRIHDSL NNSLPIGLVP TNSTNTVMDQ KNLKMSTPGQ MKAQEIERTP PTNFKRTLEE</p> <p>SNSGPLMKKH RRNGLSRSSG AQPASLPTTS QRKNSVKL TM RRRLRGQKKI GNPLHQHRK</p> <p>TVCVC</p>

**Sequence without tag. The proposed Strep-Tag is based on experience s with the expression system, a different complexity of the protein could make another tag necessary. In case you have a special request, please contact us.**

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### Characteristics:

#### Key Benefits:

- Made in Germany - from design to production - by highly experienced protein experts.
- Protein expressed with ALiCE® and purified in one-step affinity chromatography
- These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).
- State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a **made-to-order protein** and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

The big advantage of ordering our **made-to-order proteins** in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

#### Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.
- During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!

#### Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- The protein's absorbance will be measured against its specific reference buffer.
- We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.

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### Purification:

One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).

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### Purity:

> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).

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## Product Details

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Grade: custom-made

## Target Details

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Target: PPM1D

Alternative Name: PPM1D ([PPM1D Products](#))

Background: Protein phosphatase 1D (EC 3.1.3.16) (Protein phosphatase 2C isoform delta) (PP2C-delta) (Protein phosphatase magnesium-dependent 1 delta) (p53-induced protein phosphatase 1),FUNCTION: Involved in the negative regulation of p53 expression (PubMed:23242139). Required for the relief of p53-dependent checkpoint mediated cell cycle arrest. Binds to and dephosphorylates 'Ser-15' of TP53 and 'Ser-345' of CHEK1 which contributes to the functional inactivation of these proteins (PubMed:15870257, PubMed:16311512). Mediates MAPK14 dephosphorylation and inactivation (PubMed:21283629). Is also an important regulator of global heterochromatin silencing and critical in maintaining genome integrity (By similarity). {ECO:0000250|UniProtKB:Q9QZ67, ECO:0000269|PubMed:15870257, ECO:0000269|PubMed:16311512, ECO:0000269|PubMed:21283629, ECO:0000269|PubMed:23242139}.

Molecular Weight: 66.7 kDa

UniProt: [015297](#)

Pathways: [p53 Signaling](#), [Cell Division Cycle](#)

## Application Details

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Application Notes: In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.

Comment: ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from *Nicotiana tabacum* c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.

During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's

Application Details

	needed is the DNA that codes for the desired protein!
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol <b>Might differ depending on protein.</b>
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months