

# Phospho-PPP1CA-T320 Antibody kit

**Catalog No.:** RK04085

## Basic Information

**Observed MW**

38kDa

**Calculated MW**

38kDa

**Category**

Primary antibody

## Recommended Dilutions

**AP0786 WB** 1:500 - 1:2000**A12468 WB** 1:500 - 1:1000For more information please visit  
[www.abclonal.com](http://www.abclonal.com)

## Product Information

**Source** Rabbit  
**Isotype** IgG**Purification**


Affinity purification

**Storage**

Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.01% thimerosal, 50% glycerol, pH7.3.

## Contact

 | 400-999-6126 | [cn.market@abclonal.com.cn](mailto:cn.market@abclonal.com.cn) | [www.abclonal.com.cn](http://www.abclonal.com.cn)

## Background

The protein encoded by this gene is one of the three catalytic subunits of protein phosphatase 1 (PP1). This broadly expressed gene encodes the alpha subunit of the PP1 complex that associates with over 200 regulatory proteins to form holoenzymes which dephosphorylate their biological targets with high specificity. PP1 is a serine/threonine specific protein phosphatase known to be involved in the regulation of a variety of cellular processes, such as cell division, glycogen metabolism, muscle contractility, protein synthesis, and HIV-1 viral transcription. Increased PP1 activity has been observed in the end stage of heart failure. Studies suggest that PP1 is an important regulator of cardiac function and that PP1 deregulation is implicated in diabetes and multiple types of cancer. Three alternatively spliced transcript variants encoding different isoforms have been found for this gene.

## Component

Catalog No.	Product Name	Applications	Cross-Reactivity
AP0786	Phospho-PPP1CA-T320 Rabbit pAb	ELISA, WB, IHC-P	Human, Mouse, Rat
A12468	PPP1CA Rabbit pAb	ELISA, WB, IF/ICC	Human, Mouse, Rat

## Immunogen Information

**Gene ID**

5499

**Swiss Prot**

P62136

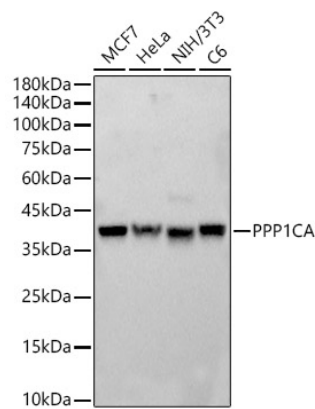
**Immunogen**

A synthetic phosphorylated peptide around T320 of human PPP1CA (NP\_002699.1). Recombinant fusion protein containing a sequence corresponding to amino acids 230-330 of human PPP1CA (NP\_002699.1).

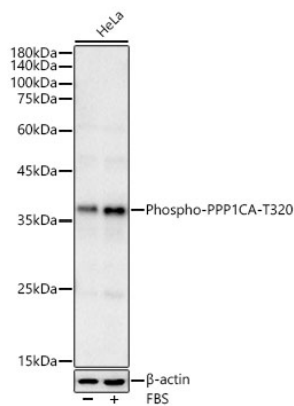
**Synonyms**

PPP1CA; PP-1A; PP1A; PP1alpha; PPP1A

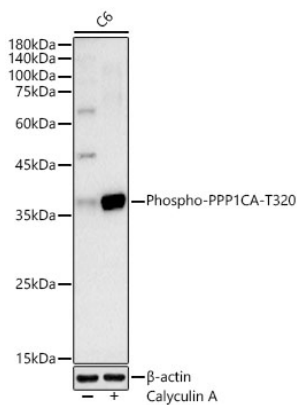
Validation Data



Western blot analysis of various lysates, using PPP1CA antibody (A12468) at 1:800 dilution.  
Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
Lysates/proteins: 25µg per lane.  
Blocking buffer: 3% nonfat dry milk in TBST.  
Detection: ECL Basic Kit (RM00020).  
Exposure time: 0.5s.

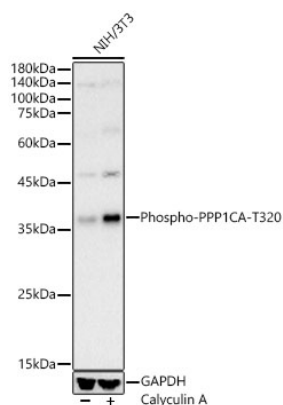


Western blot analysis of lysates from HeLa cells using Phospho-PPP1CA-T320 Rabbit pAb (AP0786) at 1:500 dilution. HeLa cells were treated by 10% FBS at 37°C for 30 minutes after serum-starvation overnight.  
Secondary antibody:HRP Goat Anti-Rabbit IgG (H+L)(AS014) at 1:10000 dilution.  
Lysates/proteins: 25 µg per lane.  
Blocking buffer: 3% nonfat dry milk in TBST.  
Detection:ECL Enhanced Kit (RM00021).  
Exposuretime: 30s.

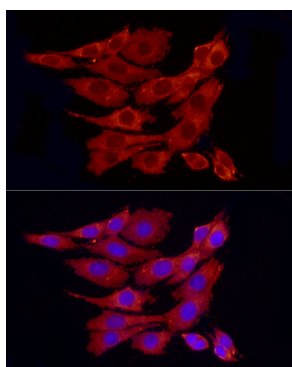


Western blot analysis of lysates from C6 cells using Phospho-PPP1CA-T320 Rabbit pAb (AP0786) at 1:500 dilution. C6 cells were treated by tunicamycin (2 µg/ml) for 8 hours.  
Secondary antibody:HRP Goat Anti-Rabbit IgG (H+L)(AS014) at 1:10000 dilution.  
Lysates/proteins: 25 µg per lane.  
Blocking buffer: 3% nonfat dry milk in TBST.  
Detection:ECL Basic Kit (RM00020).  
Exposuretime: 60s.

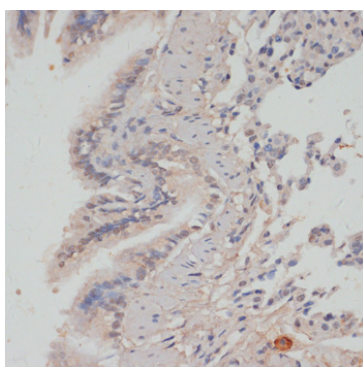
## Validation Data



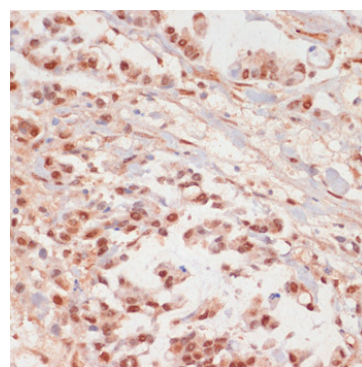
Western blot analysis of lysates from NIH/3T3 cells using Phospho-PPP1CA-T320 Rabbit pAb (AP0786) at 1:500 dilution. NIH/3T3 cells were treated by Calyculin A (100 nM) at 37°C for 30 minutes after serum-starvation overnight.  
 Secondary antibody: HRP Goat Anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
 Lysates/proteins: 25 µg per lane.  
 Blocking buffer: 3% nonfat dry milk in TBST.  
 Detection: ECL Basic Kit (RM00020).  
 Exposure time: 60s.



Immunofluorescence analysis of PC-12 cells using PPP1CA Rabbit pAb (A12468) at dilution of 1:100 (40x lens). Blue: DAPI for nuclear staining.



Immunohistochemistry analysis of Phospho-PPP1CA-T320 in paraffin-embedded rat lung using Phospho-PPP1CA-T320 Rabbit pAb (AP0786) at dilution of 1:100 (40x lens). Perform microwave antigen retrieval with 10 mM Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry analysis of Phospho-PPP1CA-T320 in paraffin-embedded human gastric cancer using Phospho-PPP1CA-T320 Rabbit pAb (AP0786) at dilution of 1:100 (40x lens). Perform microwave antigen retrieval with 10 mM Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.