

# Datasheet for ABIN7269674 anti-PPP1CA antibody (pThr320)





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## Overview

Quantity:	100 μL
Target:	PPP1CA
Binding Specificity:	pThr320
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PPP1CA antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC)
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## **Product Details**

Purpose:	Phospho-PPP1CA-T320 Rabbit pAb
Immunogen:	A phospho specific peptide corresponding to residues surrounding T320 of human PPP1CA
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Characteristics:	Phosphorylated Antibodies
Purification:	Affinity purification

## **Target Details**

Target:	PPP1CA
Alternative Name:	PPP1CA (PPP1CA Products)

## **Target Details**

Background

The protein encoded by this gene is one of the three catalytic subunits of protein phosphatase 1 (PP1). 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 in both human and mice suggest that PP1 is an important regulator of cardiac function. Mouse studies also suggest that PP1 functions as a suppressor of learning and memory. Three alternatively spliced transcript variants encoding different isoforms have been found for this gene., PPP1CA, PP-

1A,PP1A,PP1alpha,PPP1A,Epigenetics & Nuclear Signaling,Chromatin Modifying
Enzymes,Dephosphorylation,Translation Control,Regulation of elF2,Cancer,Signal
Transduction,G protein signaling,Kinase,Serine/threonine kinases,MAPK-Erk Signaling
Pathway,Endocrine & Metabolism,Lipid Metabolism,Insulin Receptor Signaling
Pathway,Neuroscience,Neurodegenerative Diseases,Dopamine Signaling in Parkinson's
Disease,Protein phosphorylation,PPP1CA

Molecular Weight:	32kDa/37kDa/38kDa
Gene ID:	5499
UniProt:	P62136
Pathways:	M Phase, Cellular Glucan Metabolic Process, Regulation of Carbohydrate Metabolic Process, Lipid Metabolism

## **Application Details**

Application Notes:	WB,1:500 - 1:2000,IHC,1:50 - 1:100	
Restrictions:	For Research Use only	

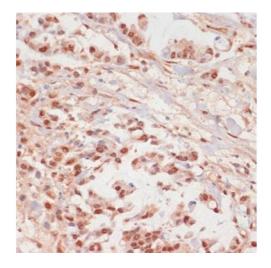
# Handling

Format:	Liquid
Buffer:	PBS with 0.02 % sodium azide,50 % glycerol, pH 7.3.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C

Storage Comment:

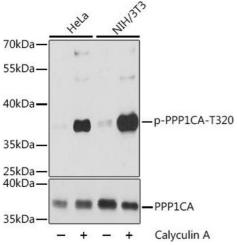
Store at -20°C. Avoid freeze / thaw cycles.

## **Images**



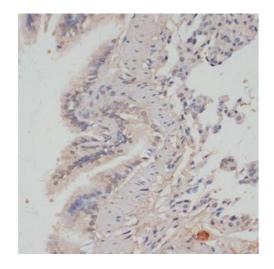
## **Immunohistochemistry**

**Image 1.** Immunohistochemistry of paraffin-embedded human gastric cancer using Phospho-PPP1CA-T320 antibody (ABIN7269674) 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.



## **Western Blotting**

Image 2. Western blot analysis of extracts of various cell lines, using Phospho-PPP1CA-T320 antibody (ABIN7269674) at 1:2000 dilution or PPP1CA antibody (ABIN6128485, ABIN6146053. ABIN6146054 ABIN6216107). 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) (ABIN1684268 and ABIN3020597) at 1:10000 dilution.Lysates/proteins: 25 µg per lane.Blocking buffer: 3 % BSA.Detection: ECL Basic Kit (RM00020).Exposure time: 30s.



#### **Immunohistochemistry**

**Image 3.** Immunohistochemistry of paraffin-embedded rat lung using Phospho-PPP1CA-T320 antibody (ABIN7269674) 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.