

## Datasheet for ABIN389613

# anti-p21 antibody (pThr57)

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Overview		
Quantity:	400 μL	
Target:	p21 (CDKN1A)	
Binding Specificity:	pThr57	
Reactivity:	Human	
Host:	Rabbit	
Clonality:	Polyclonal	
Conjugate:	This p21 antibody is un-conjugated	
Application:	Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Dot Blot (DB)	
Product Details		
Immunogen:	This P21CIP1 Antibody is generated from rabbits immunized with a KLH conjugated synthetic	
	phosphopeptide corresponding to amino acid residues surrounding T57 of human P21CIP1.	
Clone:	RB7643	
Isotype:	lg Fraction	
Purification:	This antibody is purified through a protein A column, followed by peptide affinity purification.	
Target Details		
Target:	p21 (CDKN1A)	
Alternative Name:	p21Cip1 (CDKN1A Products)	
Background:	This gene encodes a potent cyclin-dependent kinase inhibitor. The encoded protein binds to	

and inhibits the activity of cyclin-CDK2 or -CDK4 complexes, and thus functions as a regulator			
of cell cycle progression at G1. The expression of this gene is tightly controlled by the tumor			
suppressor protein p53, through which this protein mediates the p53-dependent cell cycle G1			
phase arrest in response to a variety of stress stimuli. This protein can interact with			
proliferating cell nuclear antigen (PCNA), a DNA polymerase accessory factor, and plays a			
regulatory role in S phase DNA replication and DNA damage repair. This protein was reported to			
be specifically cleaved by CASP3-like caspases, which thus leads to a dramatic activation of			
CDK2, and may be instrumental in the execution of apoptosis following caspase activation.			
Two alternatively spliced variants, which encode an identical protein, have been reported.			

Molecular Weight:	18119	
Gene ID:	1026	
NCBI Accession:	NP_000380, NP_001207706, NP_001207707, NP_510867	
UniProt:	P38936	
Pathways:	p53 Signaling, PI3K-Akt Signaling, Cell Division Cycle, AMPK Signaling, Fc-epsilon Receptor	
	Signaling Pathway, EGFR Signaling Pathway, Neurotrophin Signaling Pathway, Mitotic G1-G1/S	
	Phases, DNA Replication, Hepatitis C, Synthesis of DNA, Autophagy	

### **Application Details**

Application Notes:	IHC-P: 1:50~100. DB: 1:500	
Restrictions:	For Research Use only	

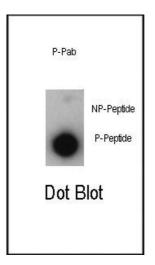
### Handling

Format:	Liquid	
Buffer:	Purified polyclonal antibody supplied in PBS with 0.09 % (W/V) sodium azide.	
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:	4 °C,-20 °C	
Storage Comment:	Maintain refrigerated at 2-8 °C for up to 6 months. For long term storage store at -20 °C in small aliquots to prevent freeze-thaw cycles.	
Expiry Date:	6 months	

Product cited in:

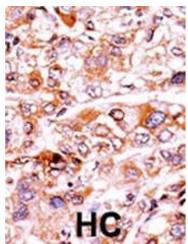
Colleoni, Paternot, Pita, Bisteau, Coulonval, Davis, Raspé, Roger: "JNKs function as CDK4-activating kinases by phosphorylating CDK4 and p21." in: **Oncogene**, Vol. 36, Issue 30, pp. 4349-4361, (2017) (PubMed).

### **Images**



#### **Dot Blot**

**Image 1.** Dot blot analysis of anti-Phospho-P21CIP1-T57 Antibody (ABIN389613 and ABIN2839617) on nitrocellulose membrane. 50 ng of Phospho-peptide or Non Phosphopeptide per dot were adsorbed. Antibody working concentrations are 0.5 µg per ml.



#### **Immunohistochemistry (Paraffin-embedded Sections)**

**Image 2.** Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry, clinical relevance has not been evaluated. BC = breast carcinoma, HC = hepatocarcinoma.