

For Research Use Only

# USP5 Polyclonal antibody

Catalog Number: 10473-1-AP

Featured Product

42 Publications



## Basic Information

### Catalog Number:

10473-1-AP

### Size:

150ul, Concentration: 800 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG0770

### GenBank Accession Number:

BC004889

### GeneID (NCBI):

8078

### UNIPROT ID:

P45974

### Full Name:

ubiquitin specific peptidase 5 (isopeptidase T)

### Calculated MW:

96 kDa

### Observed MW:

95-105 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:2000-1:12000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:100-1:400

## Applications

### Tested Applications:

WB, IHC, IP, ELISA

### Cited Applications:

WB, IHC, IF, IP, CoIP, ELISA

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, pig

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

**WB** : A549 cells, mouse brain tissue, human heart tissue, human colon tissue, U2OS cells, DU 145 cells

**IP** : mouse brain tissue,

**IHC** : human heart tissue, human spleen tissue

## Background Information

USP5, also named as ISOT, belongs to the peptidase C19 family. Knock-down of USP5 causes the accumulation of TP53/p53 and an increase in TP53/p53 transcriptional activity because the unanchored polyubiquitin that accumulates is able to compete with ubiquitinated TP53/p53 but not with MDM2 for proteasomal recognition. USP5 is a potential target for p53 activating therapeutic agents for the treatment of cancer (PMID: 19098288). It is a novel proteasome associated protein (PMID: 19182904). USP5 cleaves linear and branched multiubiquitin polymers with a marked preference for branched polymers. USP5 has 2 isoforms with the molecular mass of 96 kDa and 93 kDa.

## Notable Publications

Author	Pubmed ID	Journal	Application
Jie Lian	33123271	J Cancer	WB, IHC
Nitchakarn Kaokhum	36182100	Mol Cell Proteomics	WB
Shiori Tomita	32971090	Eur J Pharmacol	WB

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

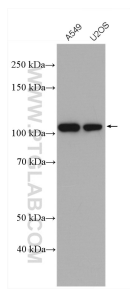
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

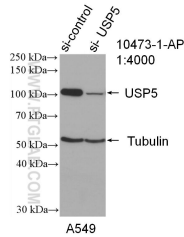
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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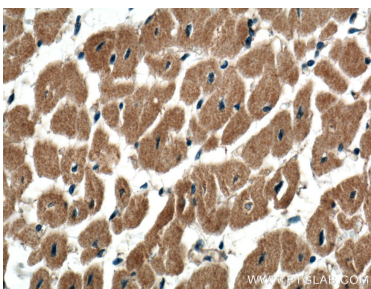
Selected Validation Data



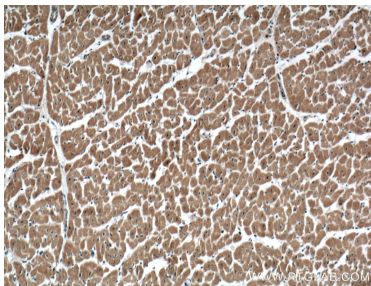
Various lysates were subjected to SDS PAGE followed by western blot with 10473-1-AP (USP5 antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



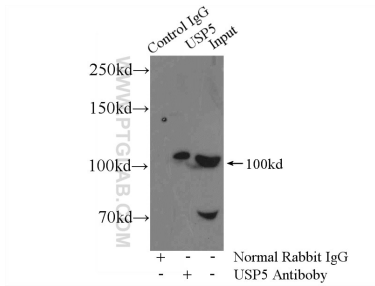
WB result of USP5 antibody (10473-1-AP; 1:4000; incubated at room temperature for 1.5 hours) with sh-Control and sh-USP5 transfected A549 cells.



Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 10473-1-AP (USP5 antibody) at dilution of 1:200 (under 40x lens).



Immunohistochemical analysis of paraffin-embedded human heart tissue slide using 10473-1-AP (USP5 antibody) at dilution of 1:200 (under 10x lens).



IP result of anti-USP5 (IP:10473-1-AP, 4ug; Detection:10473-1-AP 1:1000) with mouse brain tissue lysate 4000ug.