

For Research Use Only

USP5 Polyclonal antibody

Catalog Number: 10473-1-AP

Featured Product

34 Publications



Basic Information

Catalog Number:

10473-1-AP

Size:

150ul, Concentration: 800 µg/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 µg for 1.0-3.0 mg of total protein lysate

IHC 1:100-1:400

Applications

Tested Applications:

IHC, IP, WB, ELISA

Cited Applications:

WB, IP, IHC, IF, ELISA, CoIP

Species Specificity:

human, mouse, rat

Cited Species:

human, rat, mouse, 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

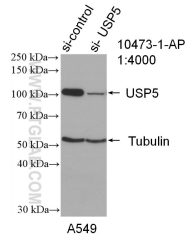
For technical support and original validation data for this product please contact:

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

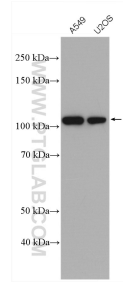
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

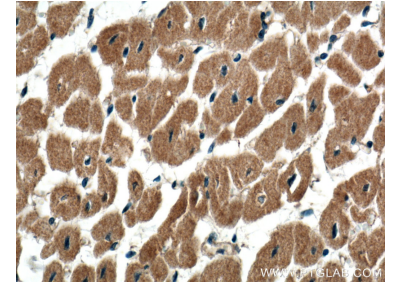
Selected Validation Data



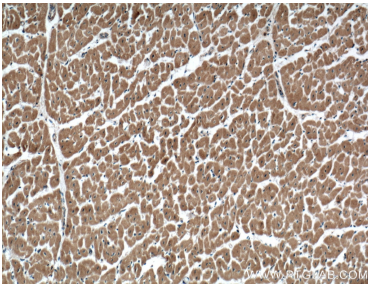
WB result of USP5 antibody (10473-1-AP; 1:4000; incubated at room temperature for 1.5 hours) with sh-Control and sh-USP5 transfected A549 cells.



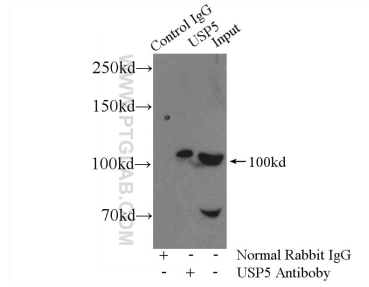
Various lysates were subjected to SDS PAGE followed by western blot with 10473-1-AP (USP5 antibody) at dilution of 1:6000 incubated at room temperature for 1.5 hours.



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.