

For Research Use Only

# PTPIP51 Polyclonal antibody

Catalog Number: 20641-1-AP

Featured Product

18 Publications



## Basic Information

### Catalog Number:

20641-1-AP

### Size:

150ul, Concentration: 700 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG14708

### GenBank Accession Number:

BC008970

### GeneID (NCBI):

55177

### UNIPROT ID:

Q96TC7

### Full Name:

family with sequence similarity 82, member A2

### Calculated MW:

470 aa, 52 kDa

### Observed MW:

52-60 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:3000

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

IHC 1:100-1:1200

## Applications

### Tested Applications:

WB, IHC, IP, ELISA

### Cited Applications:

WB, IHC, IF, COIP

### Species Specificity:

human

### Cited Species:

human, mouse, rat, monkey

**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 : HEK-293 cells, Jurkat cells

IP : HEK-293 cells,

IHC : human paracancerous of skin cancer, human cervical cancer tissue, human skin tissue

## Background Information

Protein tyrosine phosphatase-interacting protein 51 (PTPIP51), also known as RMDN3, is a mitochondrial membrane-anchored protein that interacts with ER membrane-bound VAPB. The VAPB-PTPIP51 interaction impacts on intracellular Ca<sup>2+</sup> handling (PMID: 22131369, 28345618). PTPIP51 participates in multiple cellular processes, and dysfunction of PTPIP51 is implicated in diseases such as cancer and neurodegenerative disorders (PMID: 28345618). The known initiation sites in the Ptpip51 gene would lead to molecular protein masses of 52, 38 and 30 kDa (PMID: 18854601, 19844996).

## Notable Publications

Author	Pubmed ID	Journal	Application
Yan G Zhao	28890335	Mol Cell	COIP
Hana Antonicka	32877691	Cell Metab	WB
Sterling P Arjona	36419337	CNS Neurosci Ther	WB, IHC, IF

## Storage

### Storage:

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

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol

Aliquoting is unnecessary for -20°C storage

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

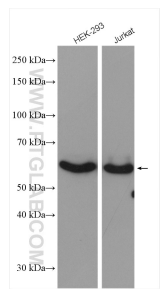
For technical support and original validation data for this product please contact:

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

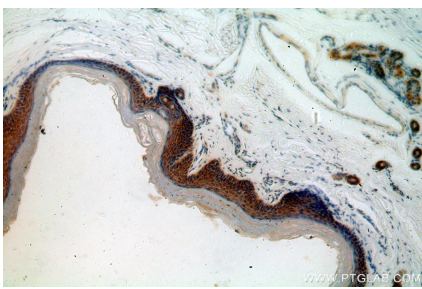
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

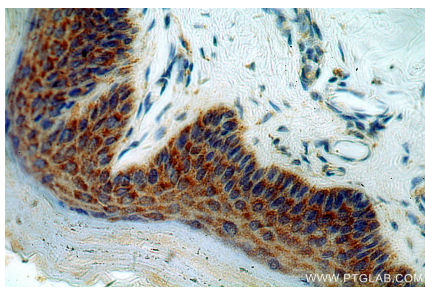
Selected Validation Data



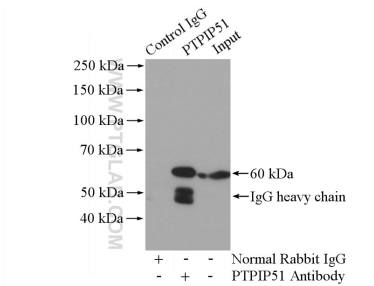
Various lysates were subjected to SDS PAGE followed by western blot with 20641-1-AP (PTPIP51 antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



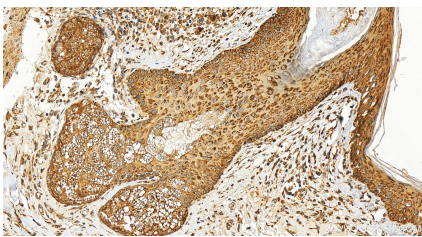
Immunohistochemical analysis of paraffin-embedded human skin using 20641-1-AP (PTPIP51 antibody) at dilution of 1:100 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human skin using 20641-1-AP (PTPIP51 antibody) at dilution of 1:100 (under 40x lens).



IP result of anti-PTPIP51 (IP:20641-1-AP, 4ug; Detection:20641-1-AP 1:1000) with HEK-293 cells lysate 1100ug.



Immunohistochemical analysis of paraffin-embedded human paracancerous of skin cancer slide using 20641-1-AP (PTPIP51 antibody) at dilution of 1:600 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).