

For Research Use Only

# Piezo1 (extracellular domain) Polyclonal antibody



Catalog Number: 28511-1-AP

Featured Product

13 Publications

## Basic Information

### Catalog Number:

28511-1-AP

### Size:

150ul, Concentration: 500 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG29858

### GenBank Accession Number:

BC008073

### GeneID (NCBI):

9780

### UNIPROT ID:

Q92508

### Full Name:

family with sequence similarity 38, member A

### Calculated MW:

286 kDa

### Observed MW:

280-300 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:500-1:2000

IHC 1:50-1:500

IF/ICC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, ELISA

### Cited Applications:

WB, IHC, IF, IP, CoIP

### Species Specificity:

human

### Cited Species:

human, mouse, rat

**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**: HeLa cells, Hepa1-6 cells, HepG2 cells, hTERT-RPE1 cells, WB result of Piezo1 (extracellular domain) antibody (28511-1-AP; 1:600; room temperature for 1.5 hours) with wild-type and Piezo1 (extracellular domain) knockout Hepa 1-6 cells.

**IHC**: human lung cancer tissue,

**IF/ICC**: THP-1 cells,

## Background Information

Mechanotransduction, the conversion of mechanical force into biological signals, is a fundamental physiologic process of mammalian cells which influences many critical processes including embryonic development, tactile, pain, and auditory sensation, regulation of vascular tone, flow sensing in the kidney, and muscle and tendon stretch. FAM38A, also known as PIEZO1, has recently been identified as a mechanotransduction protein that gets involved in mechanosensation and stretch-activated cation channel activation. Fam38A also plays a key role in epithelial cell adhesion by maintaining integrin activation through R-Ras recruitment to the ER. Mutations in gene encoding PIEZO1 are associated with hereditary xerocytosis. Piezo1 also regulates extrusion to maintain homeostatic epithelial cell numbers. This antibody was raised against the extracellular domain of human Piezo1.

## Notable Publications

Author	Pubmed ID	Journal	Application
Jin Hu	36368316	Neuron	WB,IF
Xiaoduo Zhao	35230979	JCI Insight	WB
Yue Wan	36598105	Glia	WB,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

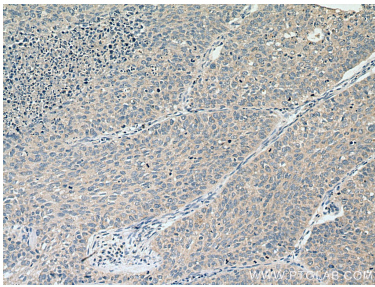
For technical support and original validation data for this product please contact:

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

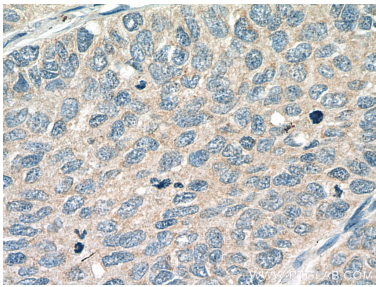
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

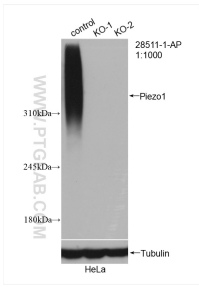
Selected Validation Data



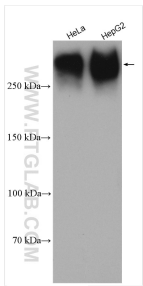
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 28511-1-AP (PIEZO1 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



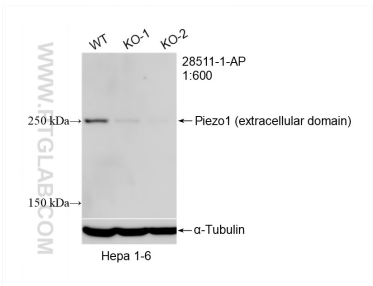
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 28511-1-AP (PIEZO1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



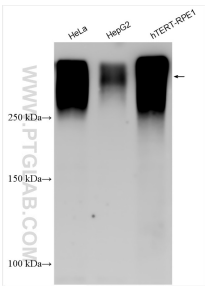
WB result of Piezo1 (extracellular domain) antibody (28511-1-AP; 1:1000; room temperature for 1.5 hours) with wild-type and Piezo1 (extracellular domain) knockout HeLa cells.



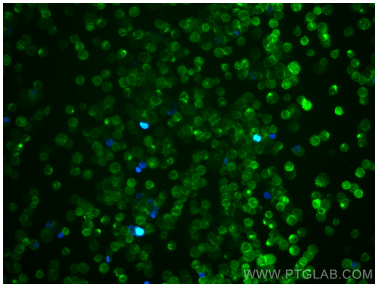
Various lysates were subjected to SDS PAGE followed by western blot with 28511-1-AP (Piezo1 (extracellular domain) antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



WB result of Piezo1 (extracellular domain) antibody (28511-1-AP; 1:600; room temperature for 1.5 hours) with wild-type and Piezo1 (extracellular domain) knockout HeLa 1-6 cells.



Various lysates were subjected to SDS PAGE followed by western blot with 28511-1-AP (Piezo1 (extracellular domain) antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of THP-1 cells using Piezo1 (extracellular domain) antibody (28511-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).