

For Research Use Only

# Piezo1 (extracellular domain) Recombinant antibody, PBS Only

Catalog Number: 82625-4-PBS



## Basic Information

### Catalog Number:

82625-4-PBS

### Size:

100ug, Concentration: 1mg/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG7791

### 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:

233-286 kDa

### Purification Method:

Protein A purification

### CloneNo.:

4B15

## Applications

### Tested Applications:

WB, IHC, IF/ICC, Indirect ELISA

### Species Specificity:

human, rat

## Background Information

Mechanotransduction, the conversion of mechanical force into biological signals, is a fundamental physiologic process of mammalian cells that 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. Piezo1 also plays a key role in epithelial cell adhesion by maintaining integrin activation through R-Ras recruitment to the ER. Mutations in the 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. (PMID: 20016066, 28416610)

## Storage

### Storage:

Store at -80°C.

### Storage Buffer:

PBS only, pH7.3

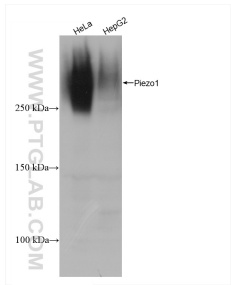
For technical support and original validation data for this product please contact:

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

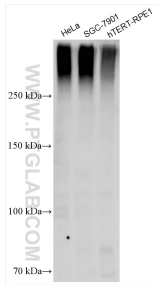
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

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

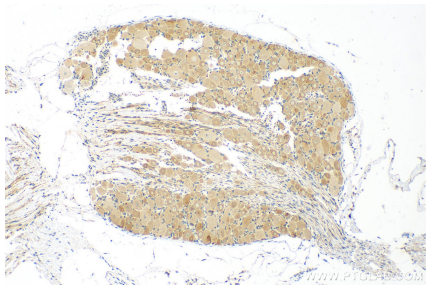
Selected Validation Data



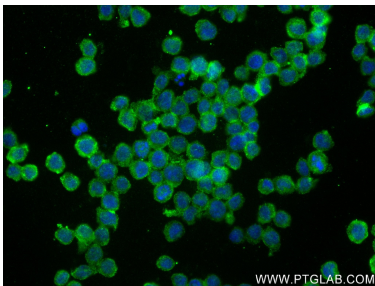
Various lysates were subjected to SDS PAGE followed by western blot with 82625-4-RR (Ag7791 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 82625-4-PBS in a different storage buffer formulation.



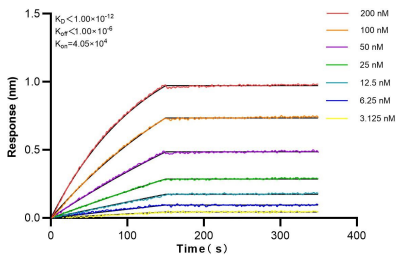
Various lysates were subjected to SDS PAGE followed by western blot with 82625-4-RR (Piezo1 (extracellular domain) antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 82625-4-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffin-embedded rat dorsal root ganglion tissue slide using 82625-4-RR (Piezo1 (extracellular domain) antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 82625-4-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed THP-1 cells using Piezo1 (extracellular domain) antibody (82625-4-RR, Clone: 4B15 ) at dilution of 1:250 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 82625-4-PBS in a different storage buffer formulation.



Biolayer interferometry (BLI) kinetic assays of 82625-4-RR against Human Piezo1 (extracellular domain) were performed. The affinity constant is below 1 pM.