

PIEZO1 Rabbit pAb

CatalogNo: YT8073

Key Features

Host Species

- Rabbit

Reactivity

- Human, Mouse, Rat

Applications

- IHC, WB

MW

- 277kD (Calculated)

Isotype

- IgG

Storage

Storage* -15°C to -25°C/1 year (Do not lower than -25°C)**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Recommended Dilution Ratios

WB 1:500-2000**IHC 1:50-200**

Basic Information

Clonality Polyclonal

Immunogen Information

Immunogen Synthesized peptide derived from human C-terminal PIEZ1**Specificity** This antibody detects endogenous levels of PIEZ1 at Human, Mouse, Rat

Target Information

Gene name PIEZO1 FAM38A KIAA0233

Protein Name Piezo-type mechanosensitive ion channel component 1 (Membrane protein induced by beta-amyloid treatment) (Mib) (Protein FAM38A)

Organism	Gene ID	UniProt ID
Human	9780 ;	Q92508 ;
Mouse		E2JF22 ;
Rat	361430 ;	Q0KL00 ;

Cellular Localization Endoplasmic reticulum membrane ; Multi-pass membrane protein. Endoplasmic reticulum-Golgi intermediate compartment membrane . Cell membrane ; Multi-pass membrane protein . Cell projection, lamellipodium membrane . Cell membrane ; Multi-pass membrane protein. In erythrocytes, located in the plasma membrane (PubMed:22529292, PubMed:23479567). Accumulates at the leading apical lamellipodia of endothelial cells in response to shear stress (PubMed:25119035). Colocalizes with F-actin and MYH9 at the actomyosin cortex in myoblasts. .

Tissue specificity Expressed in numerous tissues. In normal brain, expressed exclusively in neurons, not in astrocytes. In Alzheimer disease brains, expressed in about half of the activated astrocytes located around classical senile plaques. In Parkinson disease substantia nigra, not detected in melanin-containing neurons nor in activated astrocytes. Expressed in erythrocytes (at protein level). Expressed in myoblasts (at protein level).

Function Pore-forming subunit of a mechanosensitive non-specific cation channel . Generates currents characterized by a linear current-voltage relationship that are sensitive to ruthenium red and gadolinium. Plays a key role in epithelial cell adhesion by maintaining integrin activation through R-Ras recruitment to the ER, most probably in its activated state, and subsequent stimulation of calpain signaling . In the kidney, may contribute to the detection of intraluminal pressure changes and to urine flow sensing. Acts as shear-stress sensor that promotes endothelial cell organization and alignment in the direction of blood flow through calpain activation . Plays a key role in blood vessel formation and vascular structure in both development and adult physiology (By similarity). Acts as sensor of phosphatidylserine (PS) flipping at the plasma membrane and governs morphogenesis of muscle cells. In myoblasts, flippase-mediated PS enrichment at the inner leaflet of plasma membrane triggers channel activation and Ca²⁺ influx followed by Rho GTPases signal transduction, leading to assembly of cortical actomyosin fibers and myotube formation.

| Validation Data

| Contact information

Orders: order@immunoway.com
Support: tech@immunoway.com
Telephone: 877-594-3616 (Toll Free), 408-747-0185
Website: <http://www.immunoway.com>
Address: 2200 Ringwood Ave San Jose, CA 95131 USA



Please scan the QR code to access additional product information:
PIEZO1 Rabbit pAb

