Human PIEZO1 Antibody

Monoclonal Mouse IgG_{2B} Clone # 1081418

Catalog Number: MAB11557

DESCRIPTION

Species Reactivity	Human
Specificity	Detects a synthetic peptide around aa 150 in Direct ELISA
Source	Monoclonal Mouse IgG_{2B} Clone # 1081418
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	PIEZO1 containing synthetic peptide Accession # Q92508
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose.

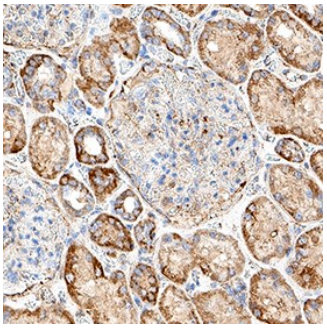
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Immunohistochemistry	3-25 µg/mL	Immersion fixed paraffin-embedded sections of human kidney

DATA

Immunohistochemistry



Detection of PIEZO1 in Human Kidney. PIEZO1 was detected in immersion fixed paraffin-embedded sections of human kidney using Mouse Anti-Human PIEZO1 Monoclonal Antibody (Catalog # MAB11557) at 5 µg/ml for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001) or the HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to the cytoplasm and membrane. View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.

PREPARATION AND STORAGE

Reconstitution	Reconstitute lyophilized material at 0.2 mg/mL in sterile PBS. For liquid material, refer to CoA for concentration.
Shipping	Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

Bio-Techne®
Global | bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL: 1.612.379.2956
USA | TEL: 800.343.7475 Canada | TEL: 855.668.8722 Europe | Middle East | Africa TEL: +44.0.1235.529449
China | info.cn@bio-techne.com TEL: 400.821.3475

Human PIEZO1 Antibody

Monoclonal Mouse IgG_{2B} Clone # 1081418

Catalog Number: MAB11557

BACKGROUND

Piezo1 is an 287kDa mechanosensitive nonselective cation channel, extensively distributed in multiple tissues and cell types. Piezo1 plays an important role in numerus physiological processes, such as determining vascular structure, urine osmoregulation, and blood pressure homeostasis. In the kidney, Piezo1 expression is found in the renal corpuscle, convoluted tubules, and collecting ducts.

References:

1. Zhao X, Kong Y, Liang B, Xu J, Lin Y, Zhou N, Li J, Jiang B, Cheng J, Li C, Wang W. Mechanosensitive Piezo1 channels mediate renal fibrosis. JCI Insight. 2022 Apr 8;7(7):e152330. doi: 10.1172/jci.insight.152330. PMID: 35230979; PMCID: PMC9057604.
2. Carrisoza-Gaytan R, Kroll KT, Hiratsuka K, Gupta NR, Morizane R, Lewis JA, Satlin LM. Functional maturation of kidney organoid tubules: PIEZO1-mediated Ca2+ signaling. Am J Physiol Cell Physiol. 2023 Mar 1;324(3):C757-C768. doi: 10.1152/ajpcell.00288.2022. Epub 2023 Feb 6. PMID: 36745528; PMCID: PMC10027089.

Bio-Techne®
Global | bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL: 1.612.379.2956
USA | TEL: 800.343.7475 Canada | TEL: 855.668.8722 Europe | Middle East | Africa TEL: +44.0.1235.529449
China | info.cn@bio-techne.com TEL: 400.821.3475