Anti-TMEM16A Antibody [PSH06-57]

HA722719

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P
Molecular Wt:	Predicted band size: 114 kDa
Clone number:	PSH06-57

Description: Anoctamin-1 (ANO1), also known as Transmembrane member 16A (TMEM16A), is a protein that, in humans, is encoded by the ANO1 gene. Anoctamin-1 is a voltage-gated calcium-activated anion channel, which acts as a chloride channel and a bicarbonate channel. additionally Anoctamin-1 is apical iodide channel. It is expressed in smooth muscle, epithelial cells, vomeronasal neurons, olfactory sustentacular cells, and is highly expressed in interstitial cells of Cajal (ICC) throughout the gastrointestinal tract.

Immunogen: Recombinant protein within human TMEM16A aa 1-333.

Positive control: HT-29 cell lysate, HCT 116 cell lysate, BxPC-3 cell lysate, human gastrointestinal stromal tumor tissue, human appendix tissue, mouse colon tissue, rat colon tissue.

Subcellular location: Apical cell membrane, Presynapse.

Database links: SwissProt: Q5XXA6 Human | Q8BHY3 Mouse
Entrez Gene: 309135 Rat

Recommended Dilutions:

WB	1:1,000
IHC-P	1:2,000

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Protein A affinity purified.

Images

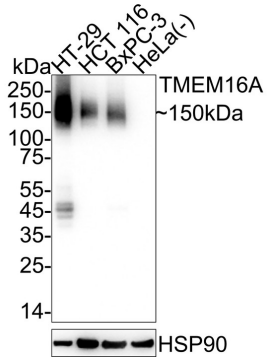

Fig1: Western blot analysis of TMEM16A on different lysates with Rabbit anti-TMEM16A antibody (HA722719) at 1/1,000 dilution.

Lane 1: HT-29 cell lysate
Lane 2: HCT 116 cell lysate
Lane 3: BxPC-3 cell lysate
Lane 4: HeLa cell lysate (negative)

Lysates/proteins at 20 µg/Lane.

Predicted band size: 114 kDa
Observed band size: 150 kDa

Exposure time: 10 seconds; ECL: K1801;

4-20% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA722719) at 1/1,000 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

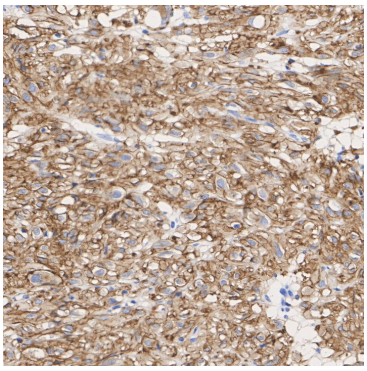

Fig2: Immunohistochemical analysis of paraffin-embedded human gastrointestinal stromal tumor tissue with Rabbit anti-TMEM16A antibody (HA722719) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA722719) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

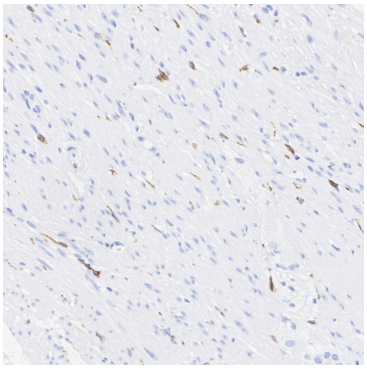

Fig3: Immunohistochemical analysis of paraffin-embedded human appendix tissue with Rabbit anti-TMEM16A antibody (HA722719) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA722719) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

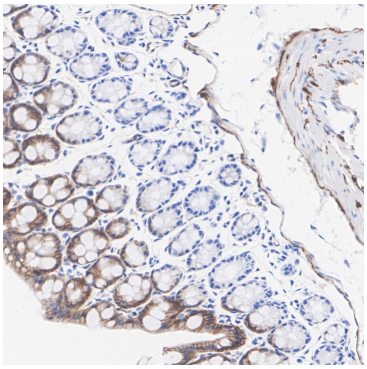

Fig4: Immunohistochemical analysis of paraffin-embedded mouse colon tissue with Rabbit anti-TMEM16A antibody (HA722719) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA722719) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

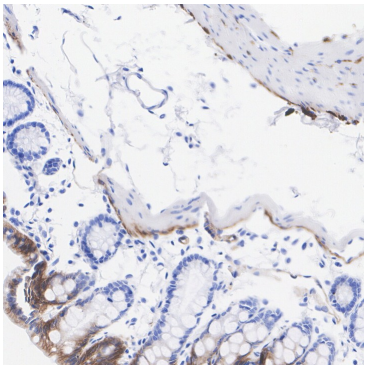

Fig5: Immunohistochemical analysis of paraffin-embedded rat colon tissue with Rabbit anti-TMEM16A antibody (HA722719) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA722719) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

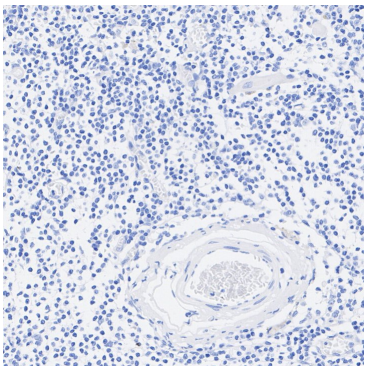

Fig6: Immunohistochemical analysis of paraffin-embedded human lymph node tissue (negative) with Rabbit anti-TMEM16A antibody (HA722719) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA722719) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Background References

1. Li S et al. TMEM16A ion channel: A novel target for cancer treatment. Life Sci. 2023 Oct
2. Liu Y et al. The Ca(2+)-activated chloride channel ANO1/TMEM16A: An emerging therapeutic target for epithelium-originated diseases? Acta Pharm Sin B. 2021 Jun