Anti-TMEM132A Antibody

0903-8

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IF-Cell, IHC-P, FC
Molecular Wt:	Predicted band size: 55 kDa

Description: TMEM132A is a member of TMEM132 family. Total of five members, namely TMEM132 A, B, C, D, E, were found. TMEM132A, also known as HSPA5-binding protein 1, may play a role in embryonic and postnatal development of the brain and regulate cAMP-induced GFAP gene expression via STAT3 phosphorylation.

Immunogen: Synthetic peptide within Human TMEM132A aa 204-253 / 1,023.

Positive control: Mouse brain tissue lysate, rat brain tissue lysate, MCF-7 cell lysate, Hela, SHG-44, mouse brain tissue.

Subcellular location: Endoplasmic reticulum. Golgi apparatus. Membrane.

Database links: SwissProt: Q24JP5 Human | Q922P8 Mouse | Q80WF4 Rat

Recommended Dilutions:

WB	1:500-1:1,000
IF-Cell	1:50-1:200
IHC-P	1:50-1:200
FC	1:50-1:200

Storage Buffer: 1*PBS (pH7.4), 0.2% 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: Immunogen affinity purified.

Images

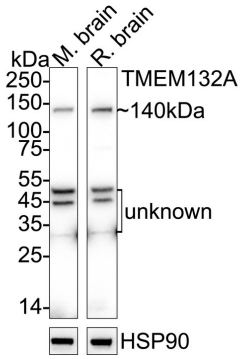

Fig1: Western blot analysis of TMEM132A on different lysates with Rabbit anti-TMEM132A antibody (0903-8) at 1/1,000 dilution.

Lane 1: Mouse brain tissue lysate
Lane 2: Rat brain tissue lysate

Lysates/proteins at 40 µg/Lane.

Predicted band size: 55 kDa
Observed band size: 140 kDa

Exposure time: 25 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 (0903-8) 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.

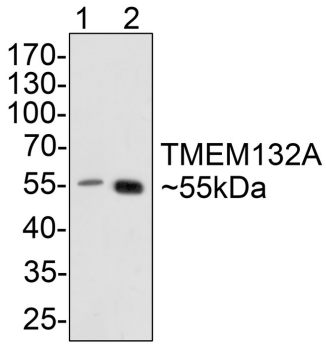

Fig2: Western blot analysis of TMEM132A on different lysates with Rabbit anti-TMEM132A antibody (0903-8) at 1/500 dilution.

Lane 1: MCF-7 cell lysate
Lane 2: Mouse brain tissue lysate (20 µg/Lane)

Lysates/proteins at 10 µg/Lane.

Predicted band size: 110/44/55 kDa
Observed band size: 55 kDa

Exposure time: 2 minutes;

10% 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 (0903-8) at 1/500 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:300,000 dilution was used for 1 hour at room temperature.

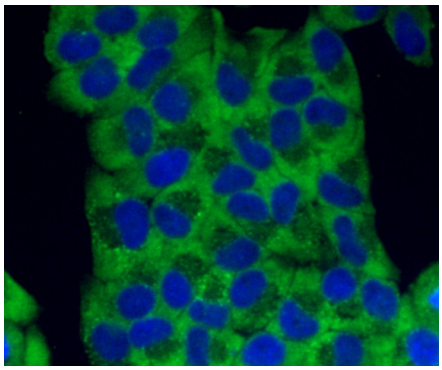

Fig3: ICC staining Transmembrane protein 132A in Hela cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

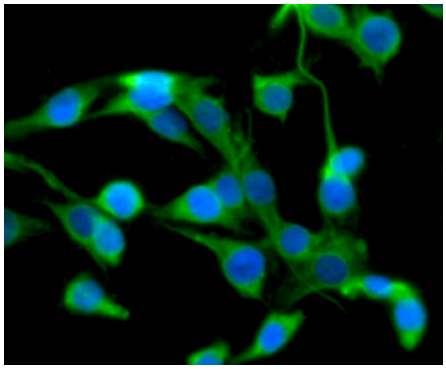

Fig4: ICC staining Transmembrane protein 132A in SHG-44 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

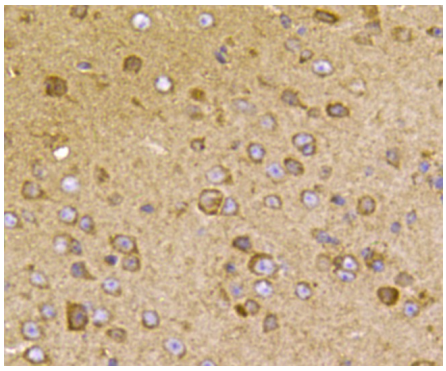

Fig5: Immunohistochemical analysis of paraffin-embedded mouse brain tissue using anti-Transmembrane protein 132A antibody. Counter stained with hematoxylin.

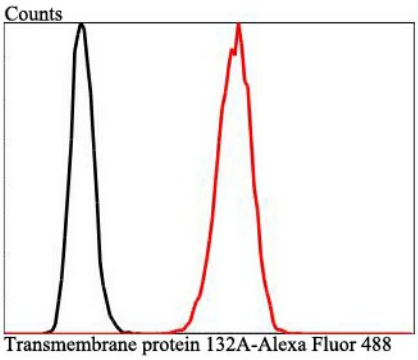

Fig6: Flow cytometric analysis of SH-SY-5Y cells with Transmembrane protein 132A antibody at 1/100 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti-rabbit IgG was used as the secondary antibody.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Zeng H et al. TMEM132A regulates mouse hindgut morphogenesis and caudal development. Development. 2023 Jul
2. Li B et al. TMEM132A ensures mouse caudal neural tube closure and regulates integrin-based mesodermal migration. Development. 2022 Sep