Anti-MOB1 Antibody [PSH17-36]

HA723919

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat, Monkey
Applications:	WB, IF-Cell, IHC-P, FC, IP
Molecular Wt:	Predicted band size: 25 kDa
Clone number:	PSH17-36

Description: MOB kinase activator 1A is an enzyme that in humans is encoded by the MOB1A gene. Mps one binder kinase activator-like 1A, also known as Mob1 homolog 1A, is a protein that in humans is encoded by the MOBKL1A gene. The protein encoded by this gene is similar to the yeast Mob1 protein. Yeast Mob1 binds Mps1p, a protein kinase essential for spindle pole body duplication and mitotic checkpoint regulation.

Immunogen: Recombinant protein within human MOB1A aa 1-216.

Positive control: HeLa cell lysate, K-562 cell lysate, PANC-1 cell lysate, MOLT-4 cell lysate, Daudi cell lysate, Raji cell lysate, C2C12 cell lysate, NIH/3T3 cell lysate, RAW264.7 cell lysate, C6 cell lysate, PC-12 cell lysate, COS-1 cell lysate, Mouse pancreas tissue lysate, Rat pancreas tissue lysate, HeLa, RAW264.7, human small intestine tissue, mouse small intestine tissue, rat small intestine tissue.

Subcellular location: Cytoplasm, Nucleus.

Database links: SwissProt: Q9H8S9 Human | Q7L9L4 Human | Q921Y0 Mouse | Q8BPB0 Mouse | Q3T1J9 Rat
Entrez Gene: 360920 Rat

Recommended Dilutions:

WB	1:5,000
IF-Cell	1:50-1:100
IHC-P	1:1,000
FC	1:1,000
IP	1-2μg/sample

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

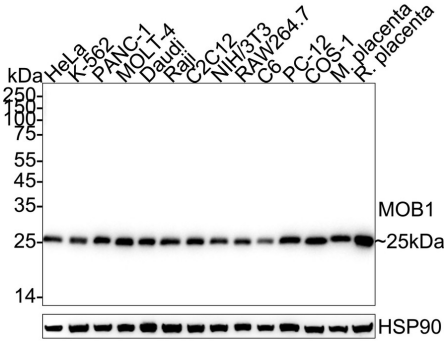

Fig1: Western blot analysis of MOB1 on different lysates with Rabbit anti-MOB1 antibody (HA723919) at 1/5,000 dilution.

Lane 1: HeLa cell lysate (20 µg/Lane)
Lane 2: K-562 cell lysate (20 µg/Lane)
Lane 3: PANC-1 cell lysate (20 µg/Lane)
Lane 4: MOLT-4 cell lysate (20 µg/Lane)
Lane 5: Daudi cell lysate (20 µg/Lane)
Lane 6: Raji cell lysate (20 µg/Lane)
Lane 7: C2C12 cell lysate (20 µg/Lane)
Lane 8: NIH/3T3 cell lysate (20 µg/Lane)
Lane 9: RAW264.7 cell lysate (20 µg/Lane)
Lane 10: C6 cell lysate (20 µg/Lane)
Lane 11: PC-12 cell lysate (20 µg/Lane)
Lane 12: COS-1 cell lysate (20 µg/Lane)
Lane 13: Mouse pancreas tissue lysate (40 µg/Lane)
Lane 14: Rat pancreas tissue lysate (40 µg/Lane)

Predicted band size: 25 kDa
Observed band size: 25 kDa
Exposure time: 8 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 (HA723919) at 1/5,000 dilution was used in primary antibody dilution (K1803) at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

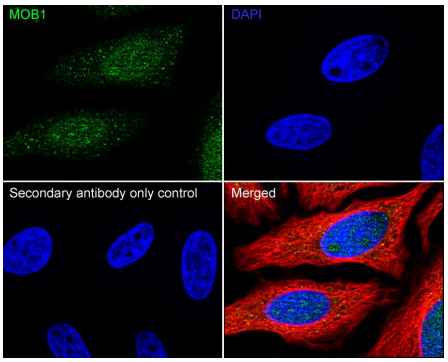

Fig2: Immunocytochemistry analysis of HeLa cells labeling MOB1 with Rabbit anti-MOB1 antibody (HA723919) at 1/50 dilution.

Cells were fixed in 4% paraformaldehyde for 15 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 15 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Rabbit anti-MOB1 antibody (HA723919) at 1/50 dilution in 1% BSA in PBST overnight at 4 ℃. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (HA601187, red) was stained at 1/100 dilution overnight at +4℃. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

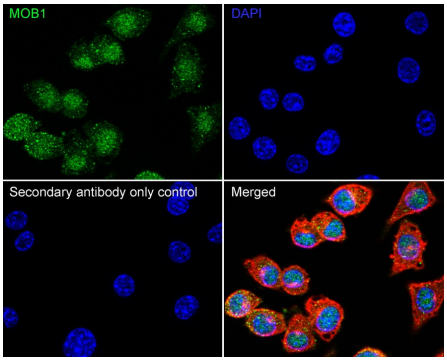

Fig3: Immunocytochemistry analysis of RAW264.7 cells labeling MOB1 with Rabbit anti-MOB1 antibody (HA723919) at 1/100 dilution.

Cells were fixed in 4% paraformaldehyde for 15 minutes at room temperature, permeabilized with 0.1% Triton X-100 in PBS for 15 minutes at room temperature, then blocked with 1% BSA in 10% negative goat serum for 1 hour at room temperature. Cells were then incubated with Rabbit anti-MOB1 antibody (HA723919) at 1/100 dilution in 1% BSA in PBST overnight at 4 ℃. Goat Anti-Rabbit IgG H&L (iFluor™ 488, HA1121) was used as the secondary antibody at 1/1,000 dilution. PBS instead of the primary antibody was used as the secondary antibody only control. Nuclear DNA was labelled in blue with DAPI.

Beta tubulin (HA601187, red) was stained at 1/100 dilution overnight at +4℃. Goat Anti-Mouse IgG H&L (iFluor™ 594, HA1126) was used as the secondary antibody at 1/1,000 dilution.

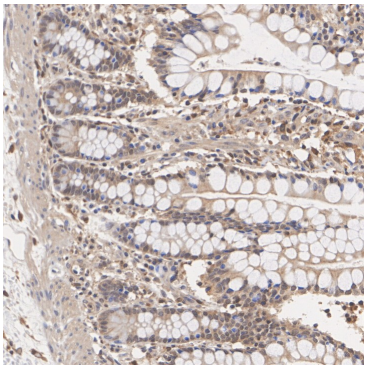

Fig4: Immunohistochemical analysis of paraffin-embedded human small intestine tissue with Rabbit anti-MOB1 antibody (HA723919) at 1/1,000 dilution.

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 (HA723919) at 1/1,000 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.

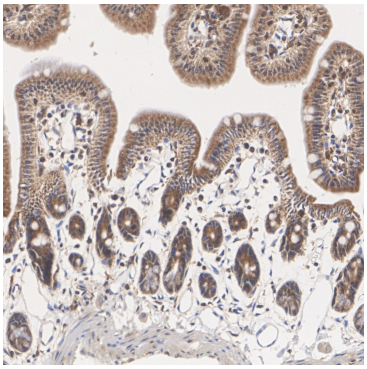

Fig5: Immunohistochemical analysis of paraffin-embedded mouse small intestine tissue with Rabbit anti-MOB1 antibody (HA723919) at 1/1,000 dilution.

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 (HA723919) at 1/1,000 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.

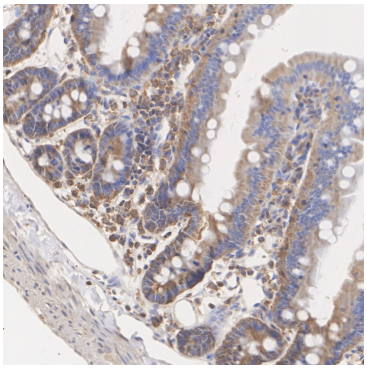

Fig6: Immunohistochemical analysis of paraffin-embedded rat small intestine tissue with Rabbit anti-MOB1 antibody (HA723919) at 1/1,000 dilution.

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 (HA723919) at 1/1,000 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.

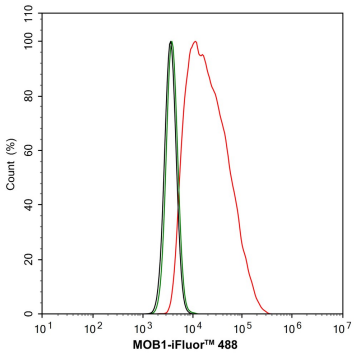

Fig7: Flow cytometric analysis of HeLa cells labeling MOB1.

Cells were fixed and permeabilized. Then stained with the primary antibody (HA723919, 1/1,000) (red) compared with Rabbit IgG Isotype Control (green). After incubation of the primary antibody at +4℃ for an hour, the cells were stained with a iFluor™ 488 conjugate-Goat anti-Rabbit IgG Secondary antibody (HA1121) at 1/1,000 dilution for 30 minutes at +4℃. Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

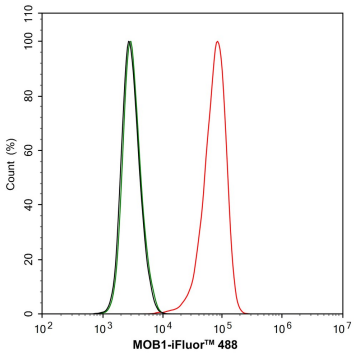

Fig8: Flow cytometric analysis of RAW264.7 cells labeling MOB1.

Cells were fixed and permeabilized. Then stained with the primary antibody (HA723919, 1/1,000) (red) compared with Rabbit IgG Isotype Control (green). After incubation of the primary antibody at +4℃ for an hour, the cells were stained with a iFluor™ 488 conjugate-Goat anti-Rabbit IgG Secondary antibody (HA1121) at 1/1,000 dilution for 30 minutes at +4℃. Unlabelled sample was used as a control (cells without incubation with primary antibody; black).

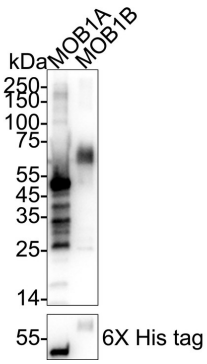

Fig9: Western blot analysis of MOB1 on different lysates with Rabbit anti-MOB1 antibody (HA723919) at 1/5,000 dilution.

Lane 1: His-tagged MOB1A recombinant protein
Lane 2: His-tagged MOB1B recombinant protein

Lysates/proteins at 50 ng/Lane.

Exposure time: 4 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 (HA723919) at 1/5,000 dilution was used in primary antibody dilution (K1803) at 4℃ overnight. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1/50,000 dilution was used for 1 hour at room temperature.

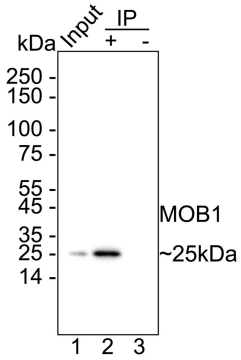

Fig10: MOB1 was immunoprecipitated from 0.2 mg HeLa cell lysate with HA723919 at 2 µg/10 µl beads. Western blot was performed from the immunoprecipitate using HA723919 at 1/5,000 dilution. HRP Conjugated Anti-Rabbit IgG for IP Nano-secondary antibody at 1/5,000 dilution was used for 1 hour at room temperature.

Lane 1: HeLa cell lysate (input)
Lane 2: HA723919 IP in HeLa cell lysate
Lane 3: Rabbit IgG instead of HA723919 in HeLa cell lysate

Blocking/Dilution buffer: primary antibody dilution (K1803)
Exposure time: 10 seconds; ECL: K1801

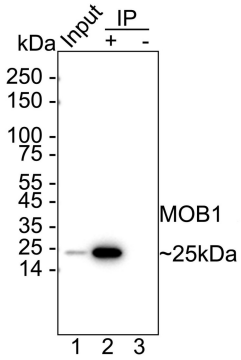

Fig11: MOB1 was immunoprecipitated from 0.2 mg RAW264.7 cell lysate with HA723919 at 2 µg/10 µl beads. Western blot was performed from the immunoprecipitate using HA723919 at 1/5,000 dilution. HRP Conjugated Anti-Rabbit IgG for IP Nano-secondary antibody at 1/5,000 dilution was used for 1 hour at room temperature.

Lane 1: RAW264.7 cell lysate (input)
Lane 2: HA723919 IP in RAW264.7 cell lysate
Lane 3: Rabbit IgG instead of HA723919 in RAW264.7 cell lysate

Blocking/Dilution buffer: primary antibody dilution (K1803)
Exposure time: 10 seconds; ECL: K1801

Background References

1. Jin J et al. Oxidative stress-CBP axis modulates MOB1 acetylation and activates the Hippo signaling pathway. Nucleic Acids Res. 2022 Apr
2. Nishio M et al. MOB1 deletion in murine mature adipocytes ameliorates obesity and diabetes. Proc Natl Acad Sci U S A. 2025 Apr