Anti-Caveolin-1 Antibody [19-D6]

EM40728

Product Type:	Mouse monoclonal IgG1, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P
Molecular Wt:	Predicted band size: 20 kDa
Clone number:	19-D6

Description: Caveolin, an integral membrane protein, is a principal component of caveolae membranes in vivo. Two isoforms of caveolin have been identified: a slower migrating 24-kDa species (-isoform) and a faster migrating 21-kDa species (-isoform). Caveolins interact with multiple signaling molecules, such as the G-protein alpha subunit, tyrosine kinase receptors, PKCs, Src family tyrosine kinases and eNOS. Caveolin-1 has been implicated in the pathogenesis of mammary epithelial cell hyperplasia.

Immunogen: Synthetic peptide within Mouse Caveolin-1 aa 129-178 / 178.

Positive control: A431 cell lysate, NIH/3T3 cell lysate, C6 cell lysate, Rat lung tissue lysate, mouse bladder tissue, rat lung tissue, human lung tissue, mouse lung tissue.

Subcellular location: Cell membrane, Golgi apparatus membrane.

Database links: SwissProt: Q03135 Human | P49817 Mouse | P41350 Rat

Recommended Dilutions:

WB	1:500
IHC-P	1:200-1:1,000

Storage Buffer: 1*PBS (pH7.4), 0.2% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃ or -80℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

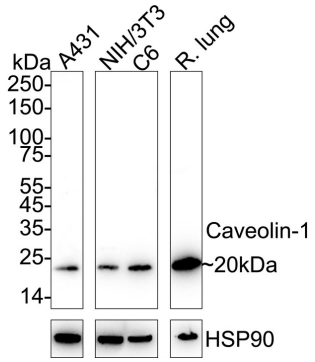

Fig1: Western blot analysis of Caveolin-1 on different lysates with Mouse anti-Caveolin-1 antibody (EM40728) at 1/500 dilution.

Lane 1: A431 cell lysate (20 µg/Lane)
Lane 2: NIH/3T3 cell lysate (20 µg/Lane)
Lane 3: C6 cell lysate (20 µg/Lane)
Lane 4: Rat lung tissue lysate (30 µg/Lane)

Predicted band size: 20 kDa
Observed band size: 20 kDa

Exposure time: Lane 1: 3 minutes; Lane 2-4: 6 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 (EM40728) at 1/500 dilution was used in 5% NFDM/TBST at 4℃ overnight. Goat Anti-Mouse IgG - HRP Secondary Antibody (HA1006) at 1/50,000 dilution was used for 1 hour at room temperature.

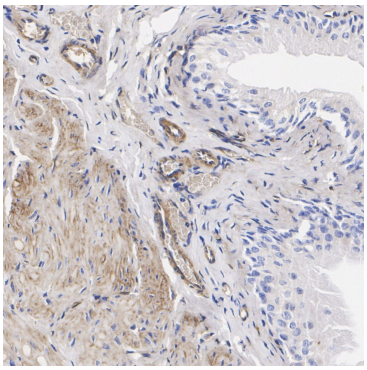

Fig2: Immunohistochemical analysis of paraffin-embedded mouse bladder tissue with Mouse anti-Caveolin-1 antibody (EM40728) at 1/1,000 dilution.

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 (EM40728) 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.

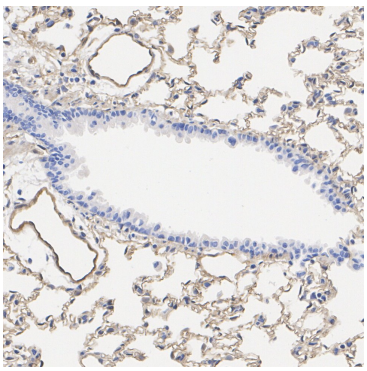

Fig3: Immunohistochemical analysis of paraffin-embedded rat lung tissue with Mouse anti-Caveolin-1 antibody (EM40728) at 1/1,000 dilution.

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 (EM40728) 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.

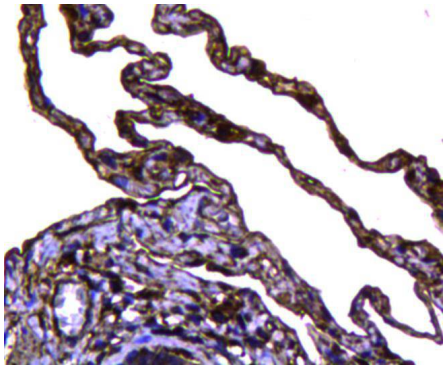

Fig4: Immunohistochemical analysis of paraffin-embedded human lung tissue using anti-Caveolin-1 antibody. Counter stained with hematoxylin.

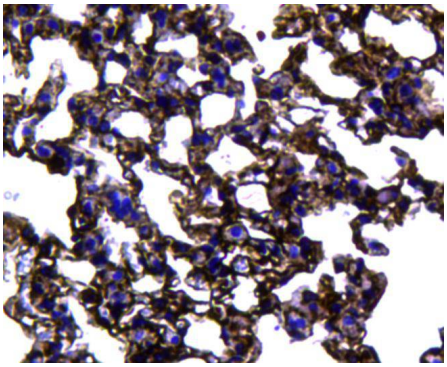

Fig5: Immunohistochemical analysis of paraffin-embedded mouse lung tissue using anti-Caveolin-1 antibody. Counter stained with hematoxylin.

Background References

1. Kaarteenaho R, et al. Epithelial N-cadherin and nuclear β-catenin are up-regulated during early development of human lung. BMC Dev Biol. 10:113 (2010)
2. Qayyum T, et al. The interrelationships between Src, Cav-1 and RhoGD12 in transitional cell carcinoma of the bladder. Br J Cancer. 106:1187-95 (2012).