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Caveolin-1 Rabbit pAb

Catalog No.: A1555SP **13 Publications**

Basic Information

Observed MW
21 kDa/24 kDa

Calculated MW
17 kDa/20 kDa

Category
Primary antibody

Applications
WB,IP,IF/ICC,IF-F,IHC-P,ELISA

Cross-Reactivity
Human, Mouse, Rat

Background

The scaffolding protein encoded by this gene is the main component of the caveolae plasma membranes found in most cell types. The protein links integrin subunits to the tyrosine kinase FYN, an initiating step in coupling integrins to the Ras-ERK pathway and promoting cell cycle progression. The gene is a tumor suppressor gene candidate and a negative regulator of the Ras-p42/44 mitogen-activated kinase cascade. Caveolin 1 and caveolin 2 are located next to each other on chromosome 7 and express colocalizing proteins that form a stable hetero-oligomeric complex. Mutations in this gene have been associated with Berardinelli-Seip congenital lipodystrophy. Alternatively spliced transcripts encode alpha and beta isoforms of caveolin 1.

Recommended Dilutions

WB	1:1000 - 1:6000
IP	0.5 μg - 4 μg antibody for 200 μg - 400 μg extracts of whole cells
IF/ICC	1:100 - 1:400
IF-F	1:200 - 1:400
IHC-P	1:1500 - 1:6000
ELISA	Recommended starting concentration is 1 μg/mL. Please optimize the concentration based on your specific assay requirements.For high-ratio antibody dilutions (≥1:10000)，a sequential dilution method is strongly recommended to ensure measurement accuracy.

Immunogen Information

Gene ID
857

Swiss Prot
Q03135

Immunogen
This information is considered to be commercially sensitive.

Synonyms
CGL3; PPH3; BSCL3; LCCNS; VIP21; MSTP085; Caveolin-1

Product Information

Source
Rabbit

Isotype
IgG

Purification
Affinity purification

Storage
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS, pH 7.3, containing 50% glycerol. Preserved with Proclin300 or sodium azide.
May contain 0.05% BSA as specified on the Certificate of Analysis.

Contact

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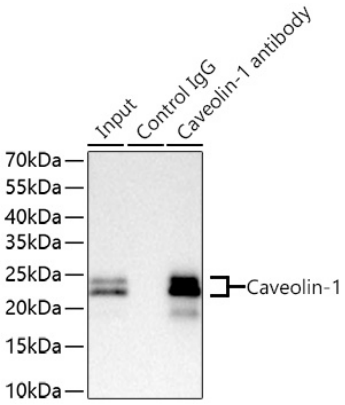
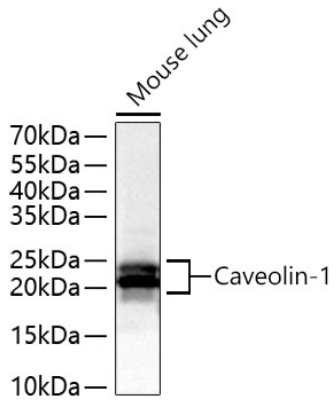
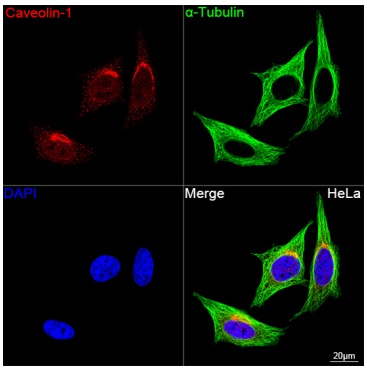
Validation Data



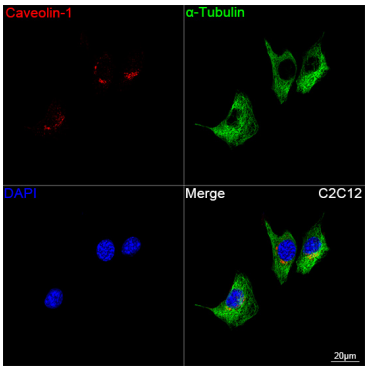
Immunoprecipitation of Caveolin-1 from 300 µg extracts of A549 cells was performed using 2 µg of Caveolin-1 Rabbit pAb (A1555SP). Rabbit Control IgG (AC005) was used to precipitate the Control IgG sample. IP samples were eluted with 1x Laemmli Buffer. The Input lane represents 10% of the total input. Western blot analysis of immunoprecipitates was conducted using Caveolin-1 Rabbit pAb (A1555SP) at a dilution of 1:1000.



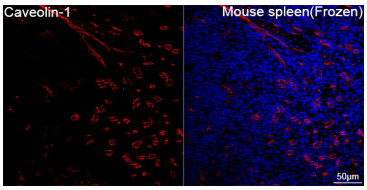
Western blot analysis of lysates from Mouse lung using Caveolin-1 Rabbit pAb (A1555SP) at 1:2000 dilution incubated overnight at 4℃.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 1 s.



Confocal imaging of HeLa cells using Caveolin-1 Rabbit pAb (A1555SP, dilution 1:100) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat anti-Mouse IgG (H+L) (AS037, dilution 1:800) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.

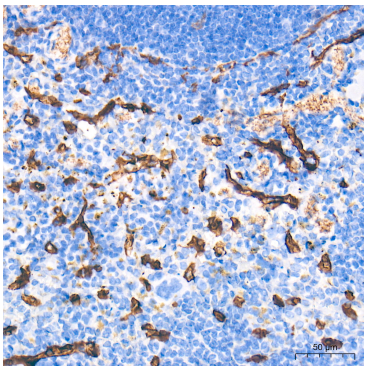


Confocal imaging of C2C12 cells using Caveolin-1 Rabbit pAb (A1555SP, dilution 1:300) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat anti-Mouse IgG (H+L) (AS037, dilution 1:800) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.

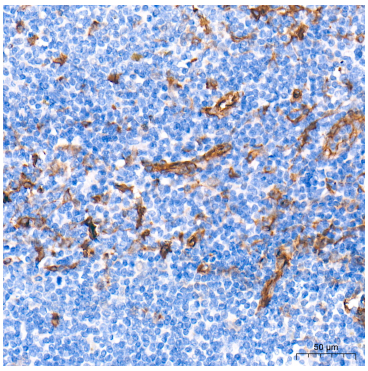


Confocal imaging of frozen sections of Mouse spleen tissue using Caveolin-1 Rabbit pAb (A1555SP, dilution 1:300) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Microwave antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.

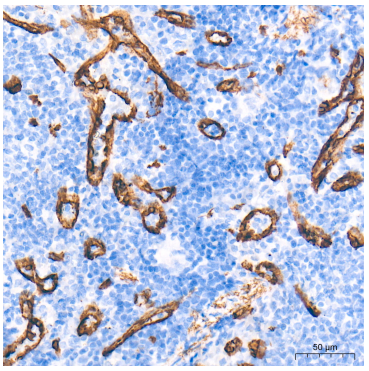
Validation Data



Immunohistochemistry analysis of paraffin-embedded Mouse spleen tissue using Caveolin-1 Rabbit pAb (A1555SP) at a dilution of 1:5000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human tonsil tissue using Caveolin-1 Rabbit pAb (A1555SP) at a dilution of 1:5000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat spleen tissue using Caveolin-1 Rabbit pAb (A1555SP) at a dilution of 1:5000 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.