

Product datasheet

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ARG30310
Endosome, Lysosome, Peroxisome Marker Antibody Panel (Catalase, Scaveolin1, Clathrin heavy chain, LAMP1)

Package: 1 kit Store at: -20°C

Component

Cat. No.	Component Name	Host clonality	Reactivity	Application	Package
ARG57976	anti-Caveolin 1 antibody	Rabbit pAb	Hu, Ms	ICC/IF, IHC-P, WB	50 μΙ
ARG63969	anti-Catalase antibody	Goat pAb	Hu, Ms	IHC-P, WB	50 μg
ARG52327	anti-CD107a / LAMP1 antibody [5H6]	Mouse mAb	Hu, Bov	ICC/IF, WB	50 μΙ
ARG53919	anti-CLTC / Clathrin heavy chain antibody [BF-06]	Mouse mAb	Hu, Ms, Rat, Bov, Pig	ELISA, FACS, ICC/IF, IP, WB	50 μg
ARG65350	Goat anti-Mouse IgG antibody (HRP)	Goat pAb	Ms	ELISA, IHC-P, WB	50 μΙ
ARG65351	Goat anti-Rabbit IgG antibody (HRP)	Goat pAb	Rb	ELISA, IHC-P, WB	50 μΙ

Summary

Product Description

Caveolin-1 (Cav-1) and Clathrin are markers for endosome. Cav-1 is a scaffolding protein within caveolar membranes in a transport vesicle. Clathrin is the major protein of the polyhedral coat of coated pits and vesicles and has a frunction in membrane invagination. The basic Clathrin oligomers are composed of three clathrin heavy chain (180 kDa) and three light chain (30 kDa) subunits and the process of polymerization is dynamically regulated by the light chains.

Lysosome-associated membrane glycoprotein 1 (Lamp1) is a marker for lysosome while catalase is a marker for Peroxisome organelle. Lamp1 functions to present carbohydrates to selectins and Catalase converts the reactive oxygen species hydrogen peroxide to water and oxygen and thereby mitigates the toxic effects of hydrogen peroxide.

Glenny et al. FEBS Lett 314: 45-48 (1992) Dodge et al. Genomics 11:174-178 (1991) Chen et al. J Proteome Res 8: 651-661 (2009)

Target Name Endosome, Lysosome, Peroxisome Marker

Alternate Names Endosome, Lysosome, Peroxisome Marker antibody; CD107a / LAMP1 antibody; CLTC / Clathrin heavy

chain antibody; Caveolin 1 antibody; Catalase antibody

Properties

Storage instruction

For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Bioinformation

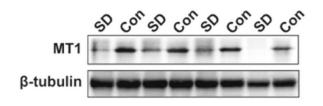
Gene Full Name Antibody Panel for Endosome, Lysosome, Peroxisome Marker (Catalase, Caveolin1, Clathrin heavy

chain, LAMP1)

Highlight Related Product:

anti-Caveolin 1 antibody; anti-Catalase antibody;

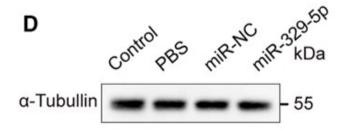
Images



ARG65351 Goat anti-Rabbit IgG antibody (HRP) WB image

Western blot: Rat placental stained with <u>ARG57589 anti-MTNR1A</u> <u>antibody</u> at 1:1000 dilution, ARG65351 Goat anti-Rabbit IgG antibody (HRP) at 1:5000 dilution.

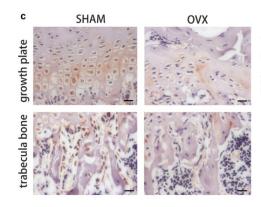
From Jinzhi Li et al. J Reprod Immunol. (2023), <u>doi:</u> 10.1016/j.jri.2023.104166, Fig. 2.B.



ARG65351 Goat anti-Rabbit IgG antibody (HRP) WB image

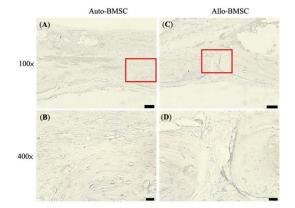
Western blot: Mouse retina stained with <u>ARG65693 anti-alpha</u> <u>Tubulin antibody</u> and ARG65351 Goat anti-Rabbit IgG antibody (HRP)

From Xiaoyuan Ye et al. Mol Ther Nucleic Acids. (2024), <u>doi:</u> <u>10.1016/j.omtn.2024.102209</u>, Fig. 5.D.



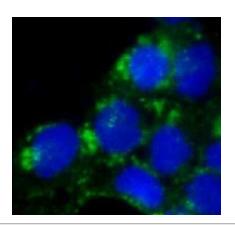
ARG65351 Goat anti-Rabbit IgG antibody (HRP) IHC-P image

From Yu-Qian Song et al. J Mol Med (Berl) (2022), <u>doi:</u> 10.1007/s00109-021-02165-0, Fig. 5.c.



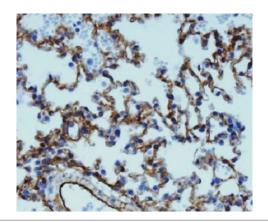
ARG65350 Goat anti-Mouse IgG antibody (HRP) IHC-P image

From Cheng-Feng Chu et al. J Pers Med. (2021), <u>doi:</u> <u>10.3390/jpm11121326</u>, Fig. 6.



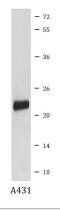
ARG57976 anti-Caveolin 1 antibody ICC/IF image

Immunofluorescence: A431 cells stained with ARG57976 anti-Caveolin 1 antibody (green).



ARG57976 anti-Caveolin 1 antibody IHC-P image

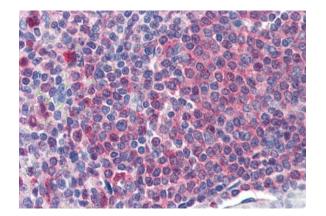
Immunohistochemistry: Paraffin-embedded Mouse lung stained with ARG57976 anti-Caveolin 1 antibody.



ARG57976 anti-Caveolin 1 antibody WB image

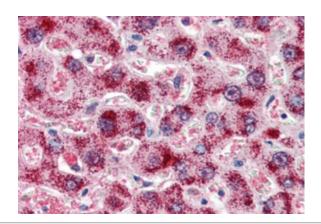
Western blot: A431 cell lysate stained with ARG57976 anti-Caveolin 1 antibody.

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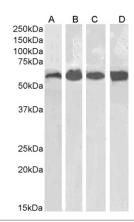
ARG63969 anti-Catalase antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human spleen tissue. Antigen Retrieval: Steam tissue section in Citrate buffer (pH 6.0). The tissue section was stained with ARG63969 anti-Catalase antibody at $2 \mu g/ml$ dilution followed by AP-staining.



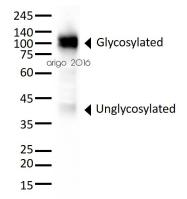
ARG63969 anti-Catalase antibody IHC-P image

Immunohistochemistry: Paraffin embedded Human Liver. (Steamed antigen retrieval with citrate buffer pH 6) stained with ARG63969 anti-Catalase antibody at 2 μ g/ml dilution followed by AP-staining.



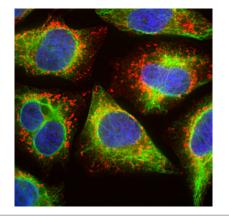
ARG63969 anti-Catalase antibody WB image

Western blot: 35 μ g of Human kidney (A), Human liver (B), Mouse kidney (C) and Mouse liver (D) lysates (in RIPA buffer) stained with ARG63969 anti-Catalase antibody at 0.1 μ g/ml dilution and incubated at RT for 1 hour.



ARG52327 anti-CD107a / LAMP1 antibody [5H6] WB image

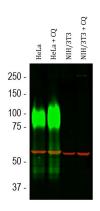
Western blot: 30 μg of HeLa cell lysate stained with ARG52327 anti-CD107a / LAMP1 antibody [5H6] at 1:5000 dilution.



ARG52327 anti-CD107a / LAMP1 antibody [5H6] ICC/IF image

Immunofluorescence: HeLa cells were treated with 50 μ M of chloroquine, an inhibitor of autophagy, for 16 hours prior to staining. Cells stained with ARG52327 anti-CD107a / LAMP1 antibody [5H6] (red) at 1:500 dilution, and costained with <u>ARG52468</u> anti-Vimentin antibody (green) at 1:10000 dilution. DAPI (blue) for nuclear staining.

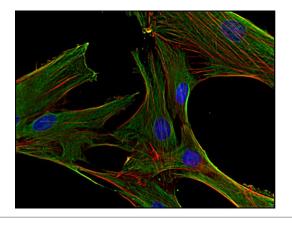
Clone 5H6 reveals vesicular staining of LAMP1 protein accumulated in swollen lysosomes, while the Vimentin antibody specifically labels the intermediate filament network in these cells.



ARG52327 anti-CD107a / LAMP1 antibody [5H6] WB image

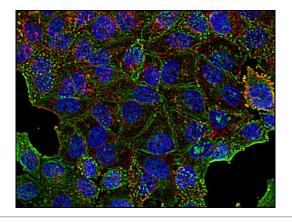
Western blot: Cells were untreated or treated with 50 μ M of chloroquine (CQ), an inhibitor of autophagy, for 24 hours. HeLa, HeLa + CQ, NIH/3T3 and NIH/3T3 + CQ (left to right) cell lysates stained with ARG52327 anti-CD107a / LAMP1 antibody [5H6] (green) at 1:10000 dilution. The smeared band between 75-120 kDa corresponds to variably glycosylated forms of the LAMP1 protein detected only in the Human cells, this antibody does not recognize the rodent LAMP1 homologue.

The same blot was stained with $\underline{\mathsf{ARG10757}}$ anti-Hsp 60 antibody (red) at 1:20000 dilution.



ARG53919 anti-CLTC / Clathrin heavy chain antibody [BF-06] ICC/IF image $\,$

Immunofluorescence: Human primary fibroblasts stained with ARG53919 anti-CLTC / Clathrin heavy chain antibody [BF-06] (green). Actin cytoskeleton was stained with phalloidin (red) and cell nuclei stained with DAPI (blue).



ARG53919 anti-CLTC / Clathrin heavy chain antibody [BF-06] ICC/IF image

Immunofluorescence: HeLa cells stained with ARG53919 anti-CLTC / Clathrin heavy chain antibody [BF-06] (green). Actin cytoskeleton was stained with phalloidin (red) and cell nuclei stained with DAPI (blue).