

# Supervillin (B8C1): sc-53556

## BACKGROUND

Members of the Gelsolin superfamily play a role in actin filament remodeling as well as several other cellular processes, including cell motility, control of apoptosis and regulation of phagocytosis. Supervillin is tightly associated with both Actin filaments and plasma membrane and may participate in cell growth, adhesion and motility. Supervillin is ubiquitously expressed. A non-muscle-specific form of Supervillin can activate androgen receptor activity; the muscle-specific isoform of Supervillin, designated Archvillin, contributes to myogenic membrane structures and differentiation.

## REFERENCES

1. Pestonjamasp, K.N., et al. 1997. Supervillin (p205): A novel membrane-associated, F-Actin-binding protein in the Villin/Gelsolin superfamily. *J. Cell Biol.* 139: 1255-1269.
2. Pope, R.K., et al. 1998. Cloning, characterization and chromosomal localization of human Supervillin (SVIL). *Genomics* 52: 342-351.
3. Ting, H.J., et al. 2002. Supervillin associates with androgen receptor and modulates its transcriptional activity. *Proc. Natl. Acad. Sci. USA* 99: 661-666.
4. Chen, Y., et al. 2003. F-Actin and myosin II binding domains in supervillin. *J. Biol. Chem.* 278: 46094-46106.
5. Oh, S.W., et al. 2003. Archvillin, a muscle-specific isoform of Supervillin, is an early expressed component of the costameric membrane skeleton. *J. Cell Sci.* 116: 2261-2275.
6. Silacci, P., et al. 2004. Gelsolin superfamily proteins: key regulators of cellular functions. *Cell. Mol. Life Sci.* 61: 2614-2623.

## CHROMOSOMAL LOCATION

Genetic locus: SVIL (human) mapping to 10p11.23; Svil (mouse) mapping to 18 A1.

## SOURCE

Supervillin (B8C1) is a mouse monoclonal antibody raised against amino acids 1-340 of Supervillin of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>2b</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Supervillin (B8C1) is available conjugated to agarose (sc-53556 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-53556 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-53556 PE), fluorescein (sc-53556 FITC), Alexa Fluor® 488 (sc-53556 AF488), Alexa Fluor® 546 (sc-53556 AF546), Alexa Fluor® 594 (sc-53556 AF594) or Alexa Fluor® 647 (sc-53556 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-53556 AF680) or Alexa Fluor® 790 (sc-53556 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## APPLICATIONS

Supervillin (B8C1) is recommended for detection of Supervillin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

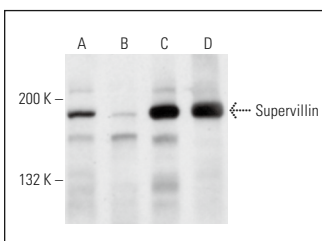
Suitable for use as control antibody for Supervillin siRNA (h): sc-61624, Supervillin siRNA (m): sc-61625, Supervillin shRNA Plasmid (h): sc-61624-SH, Supervillin shRNA Plasmid (m): sc-61625-SH, Supervillin shRNA (h) Lentiviral Particles: sc-61624-V and Supervillin shRNA (m) Lentiviral Particles: sc-61625-V.

Molecular Weight (predicted) of Supervillin isoforms p250/p205: 248/201 kDa.

Molecular Weight (observed) of Supervillin: 169-200 kDa.

Positive Controls: Sol8 cell lysate: sc-2249, HeLa whole cell lysate: sc-2200 or A549 cell lysate: sc-2413.

## DATA



Supervillin (B8C1): sc-53556. Western blot analysis of Supervillin expression in A549 (A), Jurkat (B), HeLa (C) and Sol8 (D) whole cell lysates.

## SELECT PRODUCT CITATIONS

1. Liu, H.P., et al. 2011. Association of supervillin with KIR2DL1 regulates the inhibitory signaling of natural killer cells. *Cell. Signal.* 23: 487-496.
2. Kuang, C., et al. 2023. Excessive serine from the bone marrow micro-environment impairs megakaryopoiesis and thrombopoiesis in multiple myeloma. *Nat. Commun.* 14: 2093.
3. Ogneva, I.V., et al. 2024. The motility of mouse spermatozoa changes differentially after 30-minute exposure under simulating weightlessness and hypergravity. *Int. J. Mol. Sci.* 25: 13561.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

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