

Sec5 (F-7): sc-393230



The Power to Question

BACKGROUND

The mammalian exocyst complex (Sec 6/8) is a multiple protein complex essential for targeting exocytic vesicles to specific docking sites on the plasma membrane. Sec 5 is one of eight exocyst complex subunits: Sec3, Sec5, Sec6, Sec8, Sec10, Sec15, Exo70, and Exo84. Exocyst complex regulation depends upon Sec5 binding Ral in a GTP-dependent manner. Human Sec5 maps to chromosome 6p25.3.

REFERENCES

1. Fukui, S., et al. 2003. Structural basis of the interaction between RalA and Sec5, a subunit of the Sec6/8 complex. *EMBO J.* 22: 3267-3278.
2. Mott, H.R., et al. 2003. Structure of the GTPase-binding domain of Sec5 and elucidation of its Ral binding site. *J. Biol. Chem.* 278: 17053-17059.

CHROMOSOMAL LOCATION

Genetic locus: EXOC2 (human) mapping to 6p25.3; Exoc2 (mouse) mapping to 13 A3.2.

SOURCE

Sec5 (F-7) is a mouse monoclonal antibody raised against amino acids 1-300 mapping at the N-terminus of Sec5 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Sec5 (F-7) is available conjugated to agarose (sc-393230 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393230 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393230 PE), fluorescein (sc-393230 FITC), Alexa Fluor® 488 (sc-393230 AF488), Alexa Fluor® 546 (sc-393230 AF546), Alexa Fluor® 594 (sc-393230 AF594) or Alexa Fluor® 647 (sc-393230 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-393230 AF680) or Alexa Fluor® 790 (sc-393230 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

Sec5 (F-7) is recommended for detection of Sec5 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Sec5 siRNA (h): sc-106891, Sec5 siRNA (m): sc-153316, Sec5 shRNA Plasmid (h): sc-106891-SH, Sec5 shRNA Plasmid (m): sc-153316-SH, Sec5 shRNA (h) Lentiviral Particles: sc-106891-V and Sec5 shRNA (m) Lentiviral Particles: sc-153316-V.

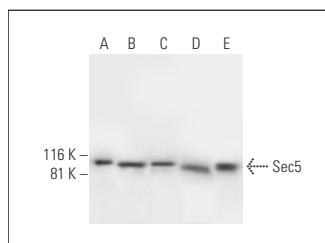
Molecular Weight of Sec5: 104 kDa.

Positive Controls: JAR cell lysate: sc-2276, RT-4 whole cell lysate: sc-364257 or A-431 whole cell lysate: sc-2201.

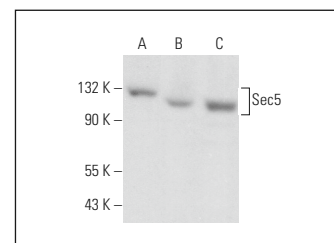
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Sec5 (F-7): sc-393230. Western blot analysis of Sec5 expression in human hippocampus tissue extract (A) and JAR (B), RT-4 (C), A-431 (D) and SH-SY5Y (E) whole cell lysates.



Sec5 (F-7): sc-393230. Western blot analysis of Sec5 expression in A-431 (A), Neuro-2A (B) and C6 (C) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Ahmed, S.M., et al. 2018. Exocyst dynamics during vesicle tethering and fusion. *Nat. Commun.* 9: 5140.
2. D'Aloia, A., et al. 2018. RalGPS2 is involved in tunneling nanotubes formation in 5637 bladder cancer cells. *Exp. Cell Res.* 362: 349-361.
3. Kuramoto, K., et al. 2021. The autophagy protein Becl1 improves Insulin sensitivity by promoting adiponectin secretion via exocyst binding. *Cell Rep.* 35: 109184.
4. D'Aloia, A., et al. 2021. RalGPS2 interacts with Akt and PDK1 promoting tunneling nanotubes formation in bladder cancer and kidney cells micro-environment. *Cancers* 13: 6330.
5. Lira, M., et al. 2021. Exo70 intracellular redistribution after repeated mild traumatic brain injury. *Biol. Res.* 54: 5.
6. Yi, R., et al. 2022. Exocyst complex component 2 is a potential host factor for SARS-CoV-2 infection. *iScience* 25: 105427.

STORAGE

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

RESEARCH USE

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