

RUFY1 (SS-41): sc-100846

BACKGROUND

RUFY1 (RUN and FYVE domain containing 1), also known as Rabip4 or ZFYVE12, is a 708 amino acid protein that localizes to the cytoplasm and the early endosome membrane. Highly expressed in testis, lung, brain and kidney, RUFY1 functions to bind phosphatidylinositol 3-phosphate-containing phospholipid vesicles and, via this interaction, participates in early endosomal trafficking. RUFY1 contains one RUN domain and one FYVE-type zinc-finger through which it mediates its ability to bind phosphatidylinositol 3-phosphate. Upon DNA damage, RUFY1 may be phosphorylated by Atm or ATR. Additionally, the phosphorylation of Tyr 389 and/or Tyr 400 residues on human RUFY1 is thought to be necessary for endosomal localization. Three isoforms of RUFY1 exist due to alternative splicing events.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: RUFY1 (human) mapping to 5q35.3; Rufy1 (mouse) mapping to 11 B1.3.

SOURCE

RUFY1 (SS-41) is a mouse monoclonal antibody raised against recombinant RUFY1 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

RUFY1 (SS-41) is recommended for detection of RUFY1 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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for RUFY1 siRNA (h): sc-91860, RUFY1 siRNA (m): sc-153172, RUFY1 shRNA Plasmid (h): sc-91860-SH, RUFY1 shRNA Plasmid (m): sc-153172-SH, RUFY1 shRNA (h) Lentiviral Particles: sc-91860-V and RUFY1 shRNA (m) Lentiviral Particles: sc-153172-V.

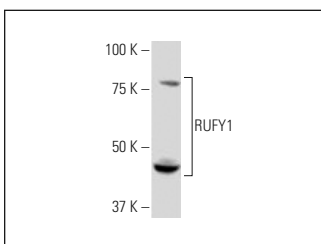
Molecular Weight of RUFY1 isoforms: 80/69/44 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or rat brain extract: sc-2392.

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).

DATA



RUFY1 (SS-41): sc-100846. Western blot analysis of RUFY1 expression in HeLa whole cell lysate.

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.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.