

RUFY1 (S-12): sc-163327

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 (S-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of RUFY1 of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-163327 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

RUFY1 (S-12) 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), 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); non cross-reactive with RUFY2 or RUFY4.

RUFY1 (S-12) is also recommended for detection of RUFY1 in additional species, including equine, canine, bovine and porcine.

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: 80 kDa.

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

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker[™] Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

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