

Rfp2 (A-2): sc-398129

BACKGROUND

The tripartite motif (TRIM) family of proteins are characterized by a conserved TRIM domain that includes a coiled-coil region, a B box-type zinc finger, one RING finger and three zinc-binding domains. Rfp2 (ret finger protein 2), also known as TRIM13 (tripartite motif-containing 13), CAR, RNF77 or LEU5, is a 407 amino acid protein that belongs to the TRIM protein family and contains one B box-type zinc finger and one RING-type zinc finger. Existing as two alternatively spliced isoforms designated α and β , Rfp2 is thought to act as a tumor suppressor that, when defective, may be involved in the development and progression of B-cell chronic lymphocytic leukemia. Additionally, Rfp2 may function as an E3 ubiquitin ligase that is involved in protein degradation pathways related to the ER-associated degradation (ERAD) pathway.

REFERENCES

1. Liu, Y., et al. 1993. Chronic lymphocytic leukemia cells with allelic deletions at 13q14 commonly have one intact RB1 gene: evidence for a role of an adjacent locus. *Proc. Natl. Acad. Sci. USA* 90: 8697-8701.
2. Liu, Y., et al. 1995. 13q deletions in lymphoid malignancies. *Blood* 86: 1911-1915.

CHROMOSOMAL LOCATION

Genetic locus: TRIM13 (human) mapping to 13q14.2; Trim13 (mouse) mapping to 14 D1.

SOURCE

Rfp2 (A-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 34-51 near the N-terminus of Rfp2 of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-398129 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

Rfp2 (A-2) is recommended for detection of Rfp2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 Rfp2 siRNA (h): sc-76392, Rfp2 siRNA (m): sc-76393, Rfp2 shRNA Plasmid (h): sc-76392-SH, Rfp2 shRNA Plasmid (m): sc-76393-SH, Rfp2 shRNA (h) Lentiviral Particles: sc-76392-V and Rfp2 shRNA (m) Lentiviral Particles: sc-76393-V.

Molecular Weight (predicted) of Rfp2: 47 kDa.

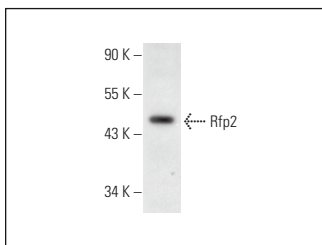
Molecular Weight (observed) of Rfp2: 42-54 kDa.

Positive Controls: IMR-32 cell lysate: sc-2409 or SK-N-MC cell lysate: sc-2237.

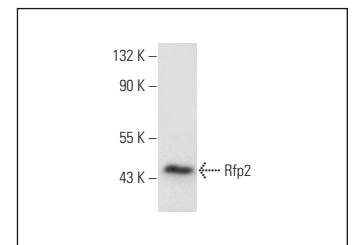
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ 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



Rfp2 (A-2): sc-398129. Western blot analysis of Rfp2 expression in IMR-32 whole cell lysate.



Rfp2 (A-2): sc-398129. Western blot analysis of Rfp2 expression in SK-N-MC whole cell lysate.

SELECT PRODUCT CITATIONS

1. Andersson-Rolf, A., et al. 2017. One-step generation of conditional and reversible gene knockouts. *Nat. Methods* 14: 287-289.
2. Romero-Trejo, D., et al. 2021. The systemic administration of neural stem cells expressing an inducible and soluble form of growth arrest specific 1 inhibits mammary gland tumor growth and the formation of metastases. *Cytotherapy* 23: 223-235.
3. Govatati, S., et al. 2024. TRIM13 reduces cholesterol efflux and increases oxidized LDL uptake leading to foam cell formation and atherosclerosis. *J. Biol. Chem.* 300: 107224.

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.