

Rfp2 (E-6): sc-393257

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.
3. Kapanadze, B., et al. 1998. A cosmid and cDNA fine physical map of a human chromosome 13q14 region frequently lost in B-cell chronic lymphocytic leukemia and identification of a new putative tumor suppressor gene, Leu5. *FEBS Lett.* 426: 266-270.
4. Reymond, A., et al. 2001. The tripartite motif family identifies cell compartments. *EMBO J.* 20: 2140-2151.
5. van Everdink, W.J., et al. 2003. RFP2, c13ORF1, and FAM10A4 are the most likely tumor suppressor gene candidates for B-cell chronic lymphocytic leukemia. *Cancer Genet. Cytogenet.* 146: 48-57.

CHROMOSOMAL LOCATION

Genetic locus: TRIM13 (human) mapping to 13q14.2.

SOURCE

Rfp2 (E-6) is a mouse monoclonal antibody raised against amino acids 212-309 mapping at the C-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.

Rfp2 (E-6) is available conjugated to agarose (sc-393257 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393257 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393257 PE), fluorescein (sc-393257 FITC), Alexa Fluor[®] 488 (sc-393257 AF488), Alexa Fluor[®] 546 (sc-393257 AF546), Alexa Fluor[®] 594 (sc-393257 AF594) or Alexa Fluor[®] 647 (sc-393257 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-393257 AF680) or Alexa Fluor[®] 790 (sc-393257 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

Rfp2 (E-6) is recommended for detection of Rfp2 of 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 shRNA Plasmid (h): sc-76392-SH and Rfp2 shRNA (h) Lentiviral Particles: sc-76392-V.

Molecular Weight (predicted) of Rfp2: 47 kDa.

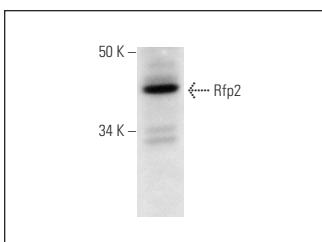
Molecular Weight (observed) of Rfp2: 42-54 kDa.

Positive Controls: NTERA-2 cl.D1 whole cell lysate: sc-364181 or IMR-32 cell lysate: sc-2409.

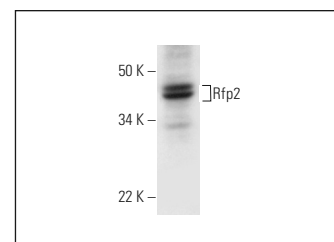
RECOMMENDED SUPPORT REAGENTS

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 (E-6): sc-393257. Western blot analysis of Rfp2 expression in NTERA-2 cl.D1 whole cell lysate.



Rfp2 (E-6): sc-393257. Western blot analysis of Rfp2 expression in IMR-32 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Ji, C.H., et al. 2019. The N-degron pathway mediates ER-phagy. *Mol. Cell* 75: 1058-1072.e9.

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.