

Rbx1 (I-16): sc-5202

BACKGROUND

Rbx1 (also designated ROC1 and Hrt1) and the closely related protein Rbx2 (also designated ROC2) are RING finger containing homologs of the yeast protein APC11, a member of the anaphase-promoting complex (APC). Rbx1 was shown to be a component of the von Hippel-Lindau (VHL) transcription elongation complex, which includes VHL, Elongin B, Elongin C and cullin-2. Rbx1 interacts with cullin-1 in the SCF (Skp1-Cdc53-F-box protein) ubiquitin ligase complex. Rbx1 functions as a common subunit of SCF complexes required for ubiquitination of various proteins including yeast G₁ cyclins, IκB-α and β-catenin. Rbx1 was shown to enhance the ubiquitin ligase activity of the VHL/cullin-2 complex, and of the SCF/cullin-1 complex.

REFERENCES

1. Kamura, T., et al. 1999. Rbx1, a component of the VHL tumor suppressor complex and SCF ubiquitin ligase. *Science* 284: 657-661.
2. Tan, P., et al. 1999. Recruitment of a ROC1-CUL1 ubiquitin ligase by Skp1 and HOS to catalyze the ubiquitination of IκB-α. *Mol. Cell* 3: 527-533.
3. Ohta, T., et al. 1999. ROC1, a homolog of APC11, represents a family of cullin partners with an associated ubiquitin ligase activity. *Mol. Cell* 3: 535-541.
4. Seol, J.H., et al. 1999. Cdc53/cullin and the essential Hrt1 RING-H2 subunit of SCF define a ubiquitin ligase module that activates the E2 enzyme Cdc34. *Genes Dev.* 13: 1614-1626.
5. Iwai, K., et al. 1999. Identification of the von hippel-lindau tumor-suppressor protein as part of an active E3 ubiquitin ligase complex. *Proc. Natl. Acad. Sci. USA* 96: 12436-12441.

CHROMOSOMAL LOCATION

Genetic locus: RBX1 (human) mapping to 22q13.2; Rbx1 (mouse) mapping to 15 E1.

SOURCE

Rbx1 (I-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Rbx1 of human origin.

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-5202 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

PROTOCOLS

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

APPLICATIONS

Rbx1 (I-16) is recommended for detection of Rbx1 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).

Suitable for use as control antibody for Rbx1 siRNA (h): sc-44072, Rbx1 siRNA (m): sc-152766, Rbx1 shRNA Plasmid (h): sc-44072-SH, Rbx1 shRNA Plasmid (m): sc-152766-SH, Rbx1 shRNA (h) Lentiviral Particles: sc-44072-V and Rbx1 shRNA (m) Lentiviral Particles: sc-152766-V.

Molecular Weight of Rbx1: 17 kDa.

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.



Try **Rbx1 (E-11): sc-393640**, our highly recommended monoclonal alternative to Rbx1 (I-16).