

Rbx2 (N-15): sc-5203

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.

CHROMOSOMAL LOCATION

Genetic locus: RNF7 (human) mapping to 3q23; Rnf7 (mouse) mapping to 9 E3.3.

SOURCE

Rbx2 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Rbx2 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-5203 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.

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.

APPLICATIONS

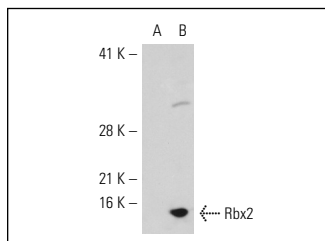
Rbx2 (N-15) is recommended for detection of Rbx2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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 Rbx2 siRNA (h): sc-44073, Rbx2 siRNA (m): sc-152767, Rbx2 shRNA Plasmid (h): sc-44073-SH, Rbx2 shRNA Plasmid (m): sc-152767-SH, Rbx2 shRNA (h) Lentiviral Particles: sc-44073-V and Rbx2 shRNA (m) Lentiviral Particles: sc-152767-V.

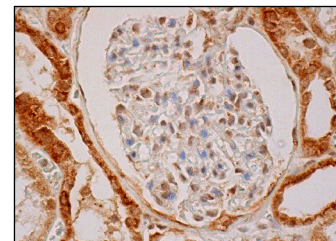
Molecular Weight of Rbx2: 14 kDa.

Positive Controls: Rbx2 (h): 293 Lysate: sc-110905.

DATA



Rbx2 (N-15): sc-5203. Western blot analysis of Rbx2 expression in non-transfected: sc-110760 (A) and human Rbx2 transfected: sc-110905 (B) 293 whole cell lysates.



Rbx2 (N-15): sc-5203. Immunoperoxidase staining of formalin fixed, paraffin-embedded human kidney tissue showing nuclear staining of cells in glomeruli and nuclear and cytoplasmic staining of cells in tubules.

SELECT PRODUCT CITATIONS

1. Kamura, T., et al. 2004. VHL-box and SOCS-box domains determine binding specificity for Cul2-Rbx1 and Cul5-Rbx2 modules of ubiquitin ligases. *Genes Dev.* 18: 3055-3065.
2. Kohroki, J., et al. 2005. ASB proteins interact with Cullin5 and Rbx2 to form E3 ubiquitin ligase complexes. *FEBS Lett.* 579: 6796-6802.
3. Bello, N.F., et al. 2009. The E3 ubiquitin ligase specificity subunit ASB2β is a novel regulator of muscle differentiation that targets filamin B to proteasomal degradation. *Cell Death Differ.* 16: 921-932.
4. Sato, Y., et al. 2009. Degradation of phosphorylated p53 by viral protein-ECS E3 ligase complex. *PLoS Pathog.* 5: e1000530.



Try **Rbx2 (G-8): sc-166554**, our highly recommended monoclonal alternative to Rbx2 (N-15).