

# RPIB9 (H-135): sc-135377

## BACKGROUND

RPIB9 (Rap 2-interacting protein 9), also known as RUNDC3B (RUN domain containing 3B) or RPIP9, is a 473 amino acid protein that belongs to the RUNDC3 family and interacts with Rap 2. RPIB9 exists as four alternatively spliced isoforms and is encoded by a gene that maps to human chromosome 7q21.12. Chromosome 7 houses over 1,000 genes and comprises nearly 5% of the human genome. Chromosome 7 has been linked to osteogenesis imperfecta, Pendred syndrome, lissencephaly, citrullinemia and Shwachman-Diamond syndrome. The deletion of a portion of the q arm of chromosome 7 is associated with Williams-Beuren syndrome, a condition characterized by mild mental retardation, an unusual comfirt and friendliness with strangers and an elfin appearance. Deletions of portions of the q arm of chromosome 7 are also seen in a number of myeloid disorders including cases of acute myelogenous leukemia and myelodysplasia.

## REFERENCES

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3. Iwasaki, S., et al. 2001. Long-term audiological feature in Pendred syndrome caused by PDS mutation. *Arch. Otolaryngol. Head Neck Surg.* 127: 705-708.
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5. Raguz, S., et al. 2005. Expression of RPIP9 (Rap2 interacting protein 9) is activated in breast carcinoma and correlates with a poor prognosis. *Int. J. Cancer* 117: 934-941.
6. Osborne, L.R., et al. 2006. Williams-Beuren syndrome diagnosis using fluorescence *in situ* hybridization. *Methods Mol. Med.* 126: 113-128.
7. Reiner, O., et al. 2006. Lissencephaly 1 linking to multiple diseases: mental retardation, neurodegeneration, schizophrenia, male sterility, and more. *Neuromolecular Med.* 8: 547-565.
8. Gilbert-Dussardier, B. 2006. Williams-Beuren syndrome. *Rev. Prat.* 56: 2102-2106.

## CHROMOSOMAL LOCATION

Genetic locus: RUNDC3B (human) mapping to 7q21.12; Runc3b (mouse) mapping to 5 A1.

## SOURCE

RPIB9 (H-135) is a rabbit polyclonal antibody raised against amino acids 301-435 mapping near the C-terminus of RPIB9 of human origin.

## RESEARCH USE

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

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

RPIB9 (H-135) is recommended for detection of RPIB9 of human origin and Runc3b of mouse and rat origin of by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ 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).

RPIB9 (H-135) is also recommended for detection of RPIB9 origin in additional species, including equine, canine and porcine.

Suitable for use as control antibody for RPIB9 siRNA (h): sc-89862, RUNDC3B siRNA (m): sc-153177, RPIB9 shRNA Plasmid (h): sc-89862-SH, RUNDC3B shRNA Plasmid (m): sc-153177-SH, RPIB9 shRNA (h) Lentiviral Particles: sc-89862-V and RUNDC3B shRNA (m) Lentiviral Particles: sc-153177-V.

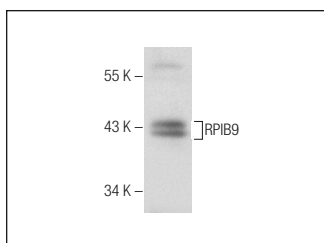
Molecular Weight of RPIB9 isoforms: 53/37/19/45 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



RPIB9 (H-135): sc-135377. Western blot analysis of RPIB9 expression in MCF7 whole cell lysate.

## STORAGE

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