



RYBP (K-13): sc-34929

BACKGROUND

The products of the Polycomb group (PcG) of genes are necessary for the maintenance of transcriptional repression of a number of important developmental genes, including the homeotic genes. RYBP is a member of the mammalian polycomb complex. RYBP (RING1- and YY1-binding protein) interacts specifically with the E2F2 and E2F3 family members, dependent on the marked box domain in these proteins. YY1 and RYBP, in combination with either E2F2 or E2F3, can stimulate Cdc6 promoter activity synergistically, at G₁/S of the cell cycle. RYBP also complexes with both RING1 proteins (RING1 and RING1B) and with M33, two mutually interacting sets of proteins of the mammalian Polycomb complex. RING1 binds RYBP and M33 through the same C-terminal domain, whereas the RYBP-M33 interaction takes place through an M33 domain not involved in binding. RYBP is widely expressed with highest levels in lymphoid tissues and placenta.

REFERENCES

1. Garcia, E., et al. 1999. RYBP, a new repressor protein that interacts with components of the mammalian Polycomb complex, and with the transcription factor YY1. *EMBO J.* 18: 3404-3418.
2. Zheng, L., et al. 2001. The death effector domain-associated factor plays distinct regulatory roles in the nucleus and cytoplasm. *J. Biol. Chem.* 276: 31945-31952.
3. Sawa, C., et al. 2002. YAF1/RYPB and YAF-2 are functionally distinct members of a cofactor family for the YY1 and E4TF1/hGABP transcription factors. *J. Biol. Chem.* 277: 22484-22490.
4. Schlisio, S., et al. 2002. Interaction of YY1 with E2Fs, mediated by RYBP, provides a mechanism for specificity of E2F function. *EMBO J.* 21: 5775-5186.

CHROMOSOMAL LOCATION

Genetic locus: RYBP (human) mapping to 3p13; Rybp (mouse) mapping to 6.

SOURCE

RYBP (K-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of RYBP 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-34929 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-34929 X, 200 µg/0.1 ml.

STORAGE

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

APPLICATIONS

RYBP (K-13) is recommended for detection of RYBP 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 RYBP siRNA (h): sc-106751, RYBP siRNA (m): sc-77379, RYBP shRNA Plasmid (h): sc-106751-SH, RYBP shRNA Plasmid (m): sc-77379-SH, RYBP shRNA (h) Lentiviral Particles: sc-106751-V and RYBP shRNA (m) Lentiviral Particles: sc-77379-V.

RYBP (K-13) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

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.

PROTOCOLS

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