



RYBP (h3): 293T Lysate: sc-158945

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

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2. Zheng, L., Schickling, O., Peter, M.E. and Lenardo, M.J. 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., Yoshikawa, T., Matsuda-Suzuki, F., Deléhouzée, S., Goto, M., Watanabe, H., Sawada, J., Kataoka, K. and Handa, H. 2002. YEAF1/RYPB and YAF2 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., Halperin, T., Vidal, M. and Nevins, J.R. 2002. Interaction of YY1 with E2Fs, mediated by RYBP, provides a mechanism for specificity of E2F function. *EMBO J.* 21: 5775-5786.

CHROMOSOMAL LOCATION

Genetic locus: RYBP (human) mapping to 3p13.

PRODUCT

RYBP (h3): 293T Lysate represents a lysate of human RYBP transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

RYBP (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive RYBP antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. 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 for detailed protocols and support products.