



RIP140 (1-300): sc-4279 WB

BACKGROUND

Nuclear receptors for steroids, thyroid hormones and retinoic acids are ligand-dependent transcription factors that activate transcription through specific DNA binding sites in their target genes. Several related transcriptional co-activators and corepressors have been described that work in concert with the steroid receptor family to either induce or repress transcription from hormone-responsive elements. This family includes GRIP1 (for GR interacting protein 1, also designated NCoA-2 or Tif2); Src-1 (for steroid receptor co-activator-1, also designated NCoA-1); RAC3 (also designated AIB1, for amplified in breast cancer, or ACTR), which displays elevated expression in estrogen receptor positive ovarian and breast cancers; and p/CIP (for p300/CBP/co-integrator protein), which is required for the transcriptional activation of p300/CBP-dependent transcription factors. RIP140 is a general coactivator/corepressor that interacts with the AF2 activation domain of nuclear receptors.

REFERENCES

1. Ribeiro, R.C., Kushner, P.J. and Baxter, J.D. 1995. The nuclear hormone receptor gene superfamily. *Annu. Rev. Med.* 46: 443-453.
2. Onate, S.A., Tsai, S.Y., Tsai, M.J. and O'Malley, B.W. 1995. Sequence and characterization of a coactivator for the steroid hormone receptor superfamily. *Science* 270: 1354-1357.
3. Cavailles, V., Dauvois, S., L'Horset, F., Lopez, G., Hoare, S., Kushner, P.J. and Parker, M.G. 1995. Nuclear factor RIP140 modulates transcriptional activation by the estrogen receptor. *EMBO J.* 14: 3741-3451.
4. Hong, H., Kohli, K., Trivedi, A., Johnson, D.L. and Stallcup, M.R. 1996. GRIP1, a novel mouse protein that serves as a transcriptional coactivator in yeast for the hormone binding domains of steroid receptors. *Proc. Natl. Acad. Sci. USA* 93: 4948-4952.
5. Li, H., Gomes, P.J. and Chen, J.D. 1997. Rac3, a steroid/nuclear receptor-associated coactivator that is related to Src-1 and TIF2. *Proc. Natl. Acad. Sci. USA* 94: 8479-8484.
6. Anzick, S.L., Kononen, J., Walker, R.L., Azorsa, D.O., Tanner, M.M., Guan, X.Y., Sauter, G., Kallioniemi, O.P., Trent, J.M. and Meltzer, P.S. 1997. AIB1, a steroid receptor coactivator amplified in breast and ovarian cancer. *Science* 277: 965-968.
7. Torchia, J., Rose, D.W., Inostroza, J., Kamei, Y., Westin, S., Glass, C.K. and Rosenfeld, M.G. 1997. The transcriptional co-activator p/CIP binds CBP and mediates nuclear-receptor function. *Nature* 387: 677-684.

SOURCE

RIP140 (1-300) is expressed in *E. coli* as 33 kDa polyhistidine tagged fusion protein corresponding to amino acids 1-300 mapping at the N-terminus of RIP140 of human origin.

PRODUCT

RIP140 (1-300) is purified from bacterial lysates (<98%) by Ni²⁺ affinity chromatography; supplied as 10 µg in 0.1 ml SDS-PAGE loading buffer.

APPLICATIONS

RIP140 (1-300) is suitable as a Western blotting control for sc-8997.

STORAGE

Store at -20° C; stable for one year from the date of shipment.

RESEARCH USE

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