SANTA CRUZ BIOTECHNOLOGY, INC.

RIP140 (2656C6a): sc-81370

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 coactivators 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 coactivator-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. Cavailles, V., et al. 1995. Nuclear factor RIP140 modulates transcriptional activation by the estrogen receptor. EMBO J. 14: 3741-3751.
2. Ribeiro, R.C., et al. 1995. The nuclear hormone receptor gene superfamily. Annu. Rev. Med. 46: 443-453.
3. Onate, S.A., et al. 1995. Sequence and characterization of a co-activator for the steroid hormone receptor superfamily. Science 270: 1354-1357.
4. Hong, H., et al. 1996. GRIP1, a novel mouse protein that serves as a transcriptional co-activator in yeast for the hormone binding domains of steroid receptors. Proc. Natl. Acad. Sci. USA 93: 4948-4952.
5. Li, H., et al. 1997. RAC3, a steroid/nuclear receptor-associated co-activator that is related to SRC-1 and TIF2. Proc. Natl. Acad. Sci. USA 94: 8479-8484.
6. Anzick, S.L., et al. 1997. AIB1, a steroid receptor co-activator amplified in breast and ovarian cancer. Science 277: 965-968.
7. Torchia, J., et al. 1997. The transcriptional co-activator p/CIP binds CBP and mediates nuclear-receptor function. Nature 387: 677-684.

CHROMOSOMAL LOCATION

Genetic locus: NRIP1 (human) mapping to 21q11.2.

SOURCE

RIP140 (2656C6a) is a mouse monoclonal antibody raised against a recombinant protein corresponding to an internal region of RIP140 of human origin.

PRODUCT

Each vial contains 100 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

APPLICATIONS

RIP140 (2656C6a) is recommended for detection of RIP140 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for RIP140 siRNA (h): sc-36428, RIP140 shRNA Plasmid (h): sc-36428-SH and RIP140 shRNA (h) Lentiviral Particles: sc-36428-V.

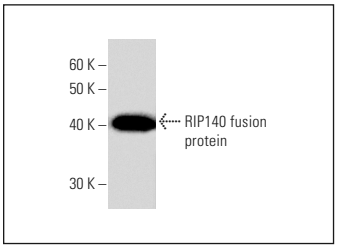
Molecular Weight of RIP140: 160-180 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or MCF7 whole cell lysate: sc-2206.

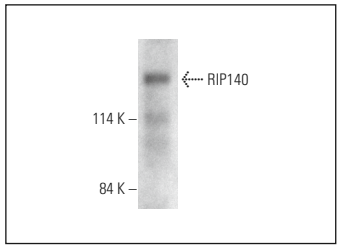
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



RIP140 (2656C6a): sc-81370. Western Blot analysis of human recombinant RIP140 fusion protein.



RIP140 (2656C6a): sc-81370. Western blot analysis of RIP140 expression in c4 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Docquier, A., et al. 2010. The transcriptional coregulator RIP140 represses E2F1 activity and discriminates breast cancer subtypes. Clin. Cancer Res. 16: 2959-2970.
2. Docquier, A., et al. 2012. The RIP140 gene is a transcriptional target of E2F1. PLoS ONE 7: e35839.

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.