

TORC1 (h): 293T Lysate: sc-114714

BACKGROUND

The TORC (transducer of regulated cAMP response element-binding) proteins, TORC1 and TORC2, are potent CREB coactivators that are exported from the nucleus in a CRM1-dependent manner. The translocation of TORC proteins is a conserved step in the activation of CRE-mediated gene expression induced by cAMP. TORC1 and TORC2 operate via phosphorylation-dependent interactions.

REFERENCES

1. Conkright, M.D., Canettieri, G., Srean, R., Guzman, E., Miraglia, L., Hogenesch, J.B. and Montminy, M. 2003. TORCs: transducers of regulated CREB activity. *Mol. Cell* 12: 413-423.
2. Iourgenko, V., Zhang, W., Mickanin, C., Daly, I., Jiang, C., Hexham, J.M., Orth, A.P., Miraglia, L., Meltzer, J., Garza, D., Chirn, G.W., McWhinnie, E., Cohen, D., Skelton, J., et al. 2003. Identification of a family of cAMP response element-binding protein coactivators by genome-scale functional analysis in mammalian cells. *Proc. Natl. Acad. Sci. USA* 100: 12147-12152.
3. Bittinger, M.A., McWhinnie, E., Meltzer, J., Iourgenko, V., Latario, B., Liu, X., Chen, C.H., Song, C., Garza, D. and Labow, M. 2004. Activation of cAMP response element-mediated gene expression by regulated nuclear transport of TORC proteins. *Curr. Biol.* 14: 2156-2161.
4. Srean, R.A., Conkright, M.D., Katoh, Y., Best, J.L., Canettieri, G., Jeffries, S., Guzman, E., Niessen, S., Yates, J.R., 3rd, Takemori, H., Okamoto, M. and Montminy, M. 2004. The CREB coactivator TORC2 functions as a calcium- and cAMP-sensitive coincidence detector. *Cell* 119: 61-74.
5. Behboudi, A., Winnes, M., Gorunova, L., van den Oord, J.J., Mertens, F., Enlund, F. and Stenman, G. 2005. Clear cell hidradenoma of the skin—a third tumor type with a t(11;19)-associated TORC1-MAML2 gene fusion. *Genes Chromosomes Cancer* 43: 202-205.

CHROMOSOMAL LOCATION

Genetic locus: CRT1 (human) mapping to 19p13.11.

PRODUCT

TORC1 (h): 293T Lysate represents a lysate of human TORC1 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

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.

APPLICATIONS

TORC1 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive TORC1 antibodies. Recommended use: 10-20 µl per lane.

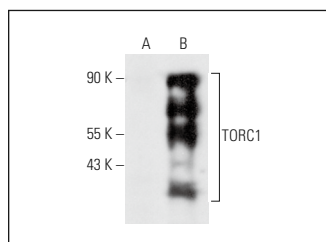
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

TORC1 (H-6): sc-365010 is recommended as a positive control antibody for Western Blot analysis of enhanced human TORC1 expression in TORC1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

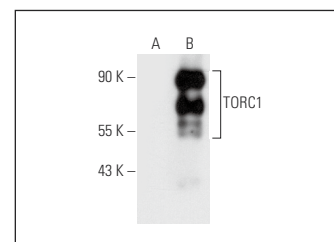
RECOMMENDED SUPPORT REAGENTS

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.

DATA



TORC1 (H-6): sc-365010. Western blot analysis of TORC1 expression in non-transfected: sc-117752 (A) and human TORC1 transfected: sc-114714 (B) 293T whole cell lysates.



TORC1 (B-12): sc-390881. Western blot analysis of TORC1 expression in non-transfected: sc-117752 (A) and human TORC1 transfected: sc-114714 (B) 293T whole cell lysates.

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.