

TORC1 (H-125): sc-67146

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., et al. 2003. TORCs: transducers of regulated CREB activity. *Mol. Cell* 12: 413-423.
2. Iourgenko, V., 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., et al. 2004. Activation of cAMP response element-mediated gene expression by regulated nuclear transport of TORC proteins. *Curr. Biol.* 14: 2156-2161.
4. Sreaton, R.A., et al. 2004. The CREB coactivator TORC2 functions as a calcium- and cAMP-sensitive coincidence detector. *Cell* 119: 61-74.
5. Behboudi, A., et al. 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: CRTC1 (human) mapping to 19p13.11; Crtc1 (mouse) mapping to 8 B3.3.

SOURCE

TORC1 (H-125) is a rabbit polyclonal antibody raised against amino acids 391-515 mapping within an internal region of TORC1 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-67146 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.

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.

APPLICATIONS

TORC1 (H-125) is recommended for detection of TORC1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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).

TORC1 (H-125) is also recommended for detection of TORC1 in additional species, including equine and bovine.

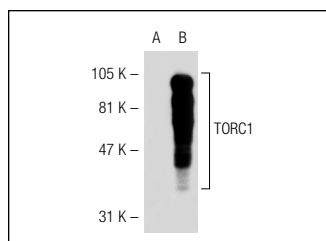
Suitable for use as control antibody for TORC1 siRNA (h): sc-45600, TORC1 siRNA (m): sc-45601, TORC1 shRNA Plasmid (h): sc-45600-SH, TORC1 shRNA Plasmid (m): sc-45601-SH, TORC1 shRNA (h) Lentiviral Particles: sc-45600-V and TORC1 shRNA (m) Lentiviral Particles: sc-45601-V.

TORC1 (H-125) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

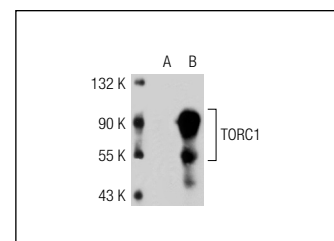
Molecular Weight of TORC1: 67 kDa.

Positive Controls: TORC1 (h): 293T Lysate: sc-114714, Jurkat nuclear extract: sc-2132 or A-431 nuclear extract: sc-2122.

DATA



TORC1 (H-125): sc-67146. Western blot analysis of TORC1 expression in non-transfected: sc-117752 (A) and human TORC1 transfected: sc-114714 (B) 293T whole cell lysates.



TORC1 (H-125): sc-67146. Western blot analysis of TORC1 expression in non-transfected: sc-117752 (A) and human TORC1 transfected: sc-115586 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Xu, Q., et al. 2015. σ 1 receptor activation regulates brain-derived neurotrophic factor through NR2A-CaMKIV-TORC1 pathway to rescue the impairment of learning and memory induced by brain ischaemia/reperfusion. *Psychopharmacology* 232: 1779-1791.

PROTOCOLS

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

MONOS
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Try **TORC1 (A-1): sc-271333** or **TORC1 (H-6): sc-365010**, our highly recommended monoclonal alternatives to TORC1 (H-125).