SANTA CRUZ BIOTECHNOLOGY, INC.

TORC2 (E-10): sc-515488

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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. Screaton, 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: CRTC2 (human) mapping to 1q21.3; Crtc2 (mouse) mapping to 3 F1.

SOURCE

TORC2 (E-10) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 566-590 near the C-terminus of TORC2 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain 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-515488 X, 200 µg/0.1 ml.

TORC2 (E-10) is available conjugated to agarose (sc-515488 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515488 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515488 PE), fluorescein (sc-515488 FITC), Alexa Fluor® 488 (sc-515488 AF488), Alexa Fluor® 546 (sc-515488 AF546), Alexa Fluor® 594 (sc-515488 AF594) or Alexa Fluor® 647 (sc-515488 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515488 AF680) or Alexa Fluor® 790 (sc-515488 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-515488 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

RESEARCH USE

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

APPLICATIONS

TORC2 (E-10) is recommended for detection of TORC2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for TORC2 siRNA (h): sc-45832, TORC2 siRNA (m): sc-45833, TORC2 shRNA Plasmid (h): sc-45832-SH, TORC2 shRNA Plasmid (m): sc-45833-SH, TORC2 shRNA (h) Lentiviral Particles: sc-45832-V and TORC2 shRNA (m) Lentiviral Particles: sc-45833-V.

TORC2 (E-10) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

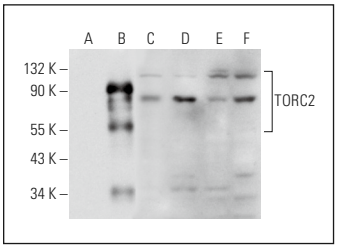
Molecular Weight of TORC2: 87 kDa.

Positive Controls: TORC2 (m3): 293T Lysate: sc-124219, U-2 OS cell lysate: sc-2295 or Jurkat nuclear extract: sc-2132.

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). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



TORC2 (E-10): sc-515488. Western blot analysis of TORC2 expression in non-transfected 293T: sc-117752 (**A**), mouse TORC2 transfected 293T: sc-124219 (**B**), JAR (**C**) and U-2 OS (**D**) whole cell lysates and HeLa (**E**) and Jurkat (**F**) nuclear extracts.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.