SANTA CRUZ BIOTECHNOLOGY, INC.

TORC2 (G-4): sc-166445



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

- Conkright, M.D., et al. 2003. TORCs: transducers of regulated CREB activity. Mol. Cell 12: 413-423.
- lourgenko, 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.
- 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.
- 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.

SOURCE

TORC2 (G-4) is a mouse monoclonal antibody raised against amino acids 406-615 mapping near the C-terminus of TORC2 of human origin.

PRODUCT

Each vial contains 200 μ g lgG₁ 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-166445 X, 200 μ g/0.1 ml.

TORC2 (G-4) is available conjugated to agarose (sc-166445 AC), 500 μ g/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-166445 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166445 PE), fluorescein (sc-166445 FITC), Alexa Fluor[®] 488 (sc-166445 AF488), Alexa Fluor[®] 546 (sc-166445 AF546), Alexa Fluor[®] 594 (sc-166445 AF594) or Alexa Fluor[®] 647 (sc-166445 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-166445 AF680) or Alexa Fluor[®] 790 (sc-166445 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

Store at 4° C, **D0 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.

APPLICATIONS

TORC2 (G-4) is recommended for detection of TORC2 of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 shRNA Plasmid (h): sc-45832-SH and TORC2 shRNA (h) Lentiviral Particles: sc-45832-V.

TORC2 (G-4) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of TORC2: 87 kDa.

Positive Controls: TORC2 (h): 293T Lysate: sc-116557, Jurkat nuclear extract: sc-2132 or JAR cell lysate: sc-2276.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM 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-IgG κ BP-FITC: sc-516140 or m-IgG κ 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 (G-4): sc-166445. Western blot analysis of TORC2 expression in Jurkat nuclear extract (\bf{A}) and JAR whole cell lysate (\bf{B}).

TORC2 (G-4): sc-166445. Western blot analysis of TORC2 expression in non-transfected: sc-11752 (**A**) and human TORC2 transfected: sc-116557 (**B**) 293T whole cell lysates.

PROTOCOLS

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

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