SANTA CRUZ BIOTECHNOLOGY, INC.

TORC3 (C-19): sc-139571

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

TORC3 (transducer of regulated cAMP response element-binding protein 3), also known as CRTC3 (CREB-regulated transcription coactivator 3), is a 619 amino acid protein that localizes to both the cytoplasm and the nucleus and belongs to the TORC family. Expressed in lung tissue and B and T lymphocytes, as well as in colon, brain, ovary, kidney, prostate, colon and heart, TORC3 functions as a transcriptional coactivator for CREB-1, thereby regulating the expression of CREB-activated genes, and is also thought to activate the SIK/TORC signaling pathway. TORC3 exists as multiple alternatively spliced isoforms and, in addition to its role in transcriptional activation, is thought to induce mitochondrial biogenesis, specifically in muscle cells.

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.

CHROMOSOMAL LOCATION

Genetic locus: CRTC3 (human) mapping to 15q26.1; Crtc3 (mouse) mapping to 7 D3.

SOURCE

TORC3 (C-19) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the C-terminus of TORC3 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-139571 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TORC3 (C-19) is recommended for detection of TORC3 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:50-1:500), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:25, dilution range 1:25-1:250) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with TORC1 or TORC2.

TORC3 (C-19) is also recommended for detection of TORC3 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for TORC3 siRNA (h): sc-90206, TORC3 siRNA (m): sc-154556, TORC3 shRNA Plasmid (h): sc-90206-SH, TORC3 shRNA Plasmid (m): sc-154556-SH, TORC3 shRNA (h) Lentiviral Particles: sc-90206-V and TORC3 shRNA (m) Lentiviral Particles: sc-154556-V.

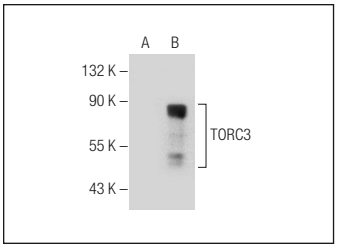
Molecular Weight of TORC3: 78 kDa.

Positive Controls: TORC3 (m): 293T Lysate: sc-127688.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



TORC3 (C-19): sc-139571. Western blot analysis of TORC3 expression in non-transfected: sc-117752 (**A**) and mouse TORC3 transfected: sc-127688 (**B**) 293T whole cell lysates.

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.