SANTA CRUZ BIOTECHNOLOGY, INC.

CREB3L3 (M-223): sc-292134

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The Power to Question

BACKGROUND

CREB3L3 (cAMP-responsive element-binding protein 3-like protein 3), also known as CREBH or HYST1481, is a 461 amino acid single-pass type II membrane protein that localizes to the endoplasmic reticulum (ER) and, in response to ER stress, is cleaved and translocated to the nucleus. Expressed exclusively in liver, CREB3L3 functions as a transcription factor that, during ER stress, is thought to activate genes that are involved in both the unfolded protein response and the acute phase response (APR). Additionally, CREB3L3 is underexpressed in hepatocellular carcinoma, suggesting a possible role as a tumor suppressor. CREB3L3 functions as a dimer and contains one leucine zipper domain, a KDEL-like sequence and a bZIP domain, through which it conveys its DNA binding ability. Three isoforms of CREB3L3 exist due to alternative splicing events.

REFERENCES

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3. Newman, J.R. and Keating, A.E. 2003. Comprehensive identification of human bZIP interactions with coiled-coil arrays. Science 300: 2097-2101.
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6. Panagopoulos, I., Möller, E., Dahlen, A., Isaksson, M., Mandahl, N., Vlamis-Gardikas, A. and Mertens, F. 2007. Characterization of the native CREB3L2 transcription factor and the FUS/CREB3L2 chimera. Genes Chromosomes Cancer 46: 181-191.
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CHROMOSOMAL LOCATION

Genetic locus:]Creb3l3 (mouse) mapping to 10 C1.

SOURCE

CREB3L3 (M-223) is a rabbit polyclonal antibody raised against amino acids 1-223 mapping at the N-terminus of CREB3L3 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

CREB3L3 (M-223) is recommended for detection of CREB3L3 of mouse and rat 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).

Suitable for use as control antibody for CREB3L3 siRNA (m): sc-77022, CREB3L3 shRNA Plasmid (m): sc-77022-SH and CREB3L3 shRNA (m) Lentiviral Particles: sc-77022-V.

Molecular Weight of CREB3L3: 50 kDa.

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.

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.