SANTA CRUZ BIOTECHNOLOGY, INC.

CREB3L1 (G-18): sc-69367

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

CREB3L1 (cAMP-responsive element-binding protein 3-like protein 1), also designated OASIS (old astrocyte specifically induced substance), is a 519 amino acid transcription factor that activates unfolded protein response target genes during endoplasmic reticulum (ER) stress. CREB3L1 may be specifically involved in the ER-stress response in astrocytes of the central nervous system. CREB3L1 increases inducible NOS1 expression and downregulates ASCT1, a receptor for Syncytin-1, which is highly expressed in glia of individuals affected by multiple sclerosis. CREB3L1 is localized to the ER membrane until the ER undergoes stress, at which point CREB3L1 is cleaved sequentially by proteases SKI-1 and S2P and its N-terminus translocates into the nucleus. There are two isoforms of CREB3L1 that are produced as a result of alternative splicing events.

CHROMOSOMAL LOCATION

Genetic locus: CREB3L1 (human) mapping to 11p11.2; Creb3l1 (mouse) mapping to 2 E1.

SOURCE

CREB3L1 (G-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CREB3L1 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-69367 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-69367 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

CREB3L1 (G-18) is recommended for detection of CREB3L1 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).

CREB3L1 (G-18) is also recommended for detection of CREB3L1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for CREB3L1 siRNA (h): sc-72995, CREB3L1 siRNA (m): sc-72996, CREB3L1 shRNA Plasmid (h): sc-72995-SH, CREB3L1 shRNA Plasmid (m): sc-72996-SH, CREB3L1 shRNA (h) Lentiviral Particles: sc-72995-V and CREB3L1 shRNA (m) Lentiviral Particles: sc-72996-V.

CREB3L1 (G-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

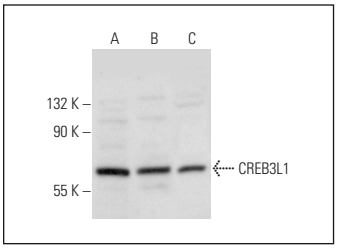
Molecular Weight of CREB3L1: 57 kDa.

Positive Controls: CREB3L1 (h): 293T Lysate: sc-174782, A549 cell lysate: sc-2413 or HEK293 whole cell lysate: sc-45136.

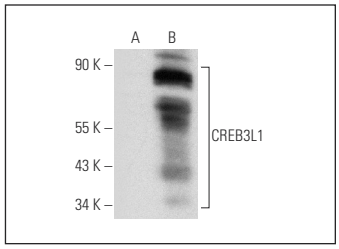
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



CREB3L1 (G-18): sc-69367. Western blot analysis of CREB3L1 expression in A549 (**A**), HEK293 (**B**) and PANC-1 (**C**) whole cell lysates.



CREB3L1 (G-18): sc-69367. Western blot analysis of CREB3L1 expression in non-transfected: sc-117752 (**A**) and human CREB3L1 transfected: sc-174782 (**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.

PROTOCOLS

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