SANTA CRUZ BIOTECHNOLOGY, INC.

CREB3L2 (F-23): sc-133483

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

CREB3L2 (cAMP responsive element binding protein 3-like 2), also known as BBF2H7, is a 520 amino acid single-pass type II membrane protein that localizes to the endoplasmic reticulum and contains one bZIP domain. Expressed in a wide variety of tissues, including lung, spleen, placenta and intestine, CREB3L2 functions as a transcriptional activator that binds DNA as a dimer and is thought to act during endoplasmic reticulum stress, specifically by activating the transcription of unfolded protein response target genes. Additionally, CREB3L2 is thought to be involved in preventing the accumulation of unfolded proteins in damaged neurons, thereby playing a role in neuronal maintenance. Chromosomal rearrangements that involve the CREB3L2 gene are associated with low grade fibromyxoid sarcomas (LGFMSs). Multiple isoforms of CREB3L2 exist due to alternative splicing events.

REFERENCES

1. Bejarano, P.A., et al. 2000. Hyalinizing spindle cell tumor with giant rosettes—a soft tissue tumor with mesenchymal and neuroendocrine features. An immunohistochemical, ultrastructural, and cytogenetic analysis. Arch. Pathol. Lab. Med. 124: 1179-1184.
2. Reid, R., et al. 2003. Low-grade fibromyxoid sarcoma and hyalinizing spindle cell tumor with giant rosettes share a common t(7;16)(q34;p11) translocation. Am. J. Surg. Pathol. 27: 1229-1236.
3. Storlazzi, C.T., et al. 2003. Fusion of the FUS and BBF2H7 genes in low grade fibromyxoid sarcoma. Hum. Mol. Genet. 12: 2349-2358.

CHROMOSOMAL LOCATION

Genetic locus: CREB3L2 (human) mapping to 7q33.

SOURCE

CREB3L2 (F-23) is a Protein A purified rabbit polyclonal antibody raised against synthetic CREB3L2 peptide of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

CREB3L2 (F-23) is recommended for detection of CREB3L2 of 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), immunohistochemistry (including paraffin-embedded sections) (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 CREB3L2 siRNA (h): sc-72997, CREB3L2 shRNA Plasmid (h): sc-72997-SH and CREB3L2 shRNA (h) Lentiviral Particles: sc-72997-V.

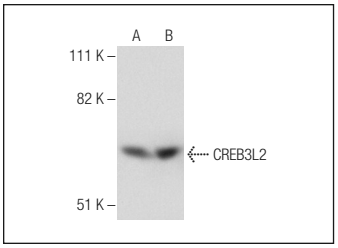
Molecular Weight of CREB3L2: 57 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or THP-1 nuclear extract: sc-24963.

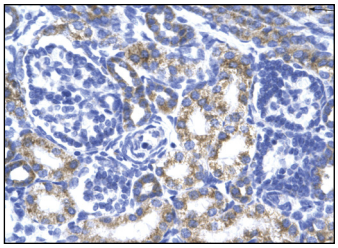
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



CREB3L2 (F-23): sc-133483. Western blot analysis of CREB3L2 expression in HeLa (**A**) and THP-1 (**B**) nuclear extracts.



CREB3L2 (F-23): sc-133483. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human kidney tissue showing cytoplasmic localization.

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.