

CREB3L2 (C-10): sc-515018

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.
4. Panagopoulos, I., et al. 2004. The chimeric FUS/CREB3L2 gene is specific for low-grade fibromyxoid sarcoma. *Genes Chromosomes Cancer* 40: 218-228.
5. Online Mendelian Inheritance in Man, OMIM™. 2004. Johns Hopkins University, Baltimore, MD. MIM Number: 608834. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

CHROMOSOMAL LOCATION

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

SOURCE

CREB3L2 (C-10) is a mouse monoclonal antibody raised against amino acids 1-133 mapping at the N-terminus of CREB3L2 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CREB3L2 (C-10) is available conjugated to agarose (sc-515018 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515018 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515018 PE), fluorescein (sc-515018 FITC), Alexa Fluor® 488 (sc-515018 AF488), Alexa Fluor® 546 (sc-515018 AF546), Alexa Fluor® 594 (sc-515018 AF594) or Alexa Fluor® 647 (sc-515018 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515018 AF680) or Alexa Fluor® 790 (sc-515018 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

CREB3L2 (C-10) is recommended for detection of CREB3L2 of human origin by Western Blotting (starting dilution 1:100, 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.

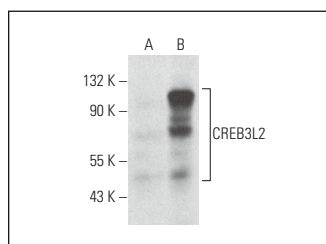
Molecular Weight of CREB3L2: 57 kDa.

Positive Controls: CREB3L2 (h3): 293T Lysate: sc-370243.

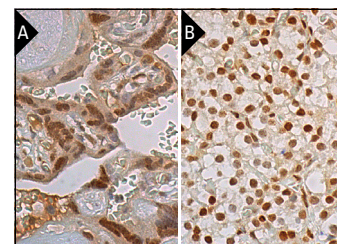
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ 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-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



CREB3L2 (C-10): sc-515018. Western blot analysis of CREB3L2 expression in non-transfected: sc-117752 (A) and human CREB3L2 transfected: sc-370243 (B) 293T whole cell lysates.



CREB3L2 (C-10): sc-515018. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing nuclear and cytoplasmic staining of trophoblastic cells (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human parathyroid gland tissue showing nuclear staining of glandular cells (B).

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.

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