

# CREB3L2 (A-3): sc-515816

## 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; Creb3l2 (mouse) mapping to 6 B1.

## SOURCE

CREB3L2 (A-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 172-197 within an internal region of CREB3L2 of human origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>1</sub> kappa light chain 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-515816 X, 200 µg/0.1 ml.

CREB3L2 (A-3) is available conjugated to agarose (sc-515816 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515816 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515816 PE), fluorescein (sc-515816 FITC), Alexa Fluor® 488 (sc-515816 AF488), Alexa Fluor® 546 (sc-515816 AF546), Alexa Fluor® 594 (sc-515816 AF594) or Alexa Fluor® 647 (sc-515816 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515816 AF680) or Alexa Fluor® 790 (sc-515816 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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## RESEARCH USE

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

## APPLICATIONS

CREB3L2 (A-3) is recommended for detection of CREB3L2 of mouse, rat and 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) 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 siRNA (m): sc-72998, CREB3L2 shRNA Plasmid (h): sc-72997-SH, CREB3L2 shRNA Plasmid (m): sc-72998-SH, CREB3L2 shRNA (h) Lentiviral Particles: sc-72997-V and CREB3L2 shRNA (m) Lentiviral Particles: sc-72998-V.

CREB3L2 (A-3) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

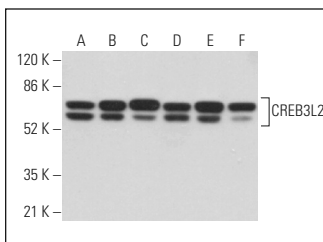
Molecular Weight of CREB3L2: 57 kDa.

Positive Controls: WI-38 whole cell lysate: sc-364260, EOC 20 whole cell lysate: sc-364187 or K-562 whole cell lysate: sc-2203.

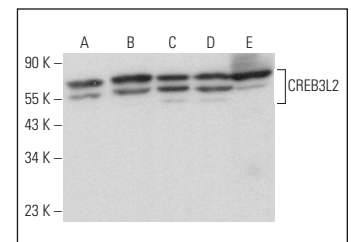
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BPHRP: sc-516102 or m-IgGκ BPHRP (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 BPHRP-FITC: sc-516140 or m-IgGκ BPHRP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## DATA



CREB3L2 (A-3): sc-515816. Western blot analysis of CREB3L2 expression in WI-38 (A), EOC 20 (B), c4 (C), K-562 (D), RAW 264.7 (E) and AMJ2-C8 (F) whole cell lysates.



CREB3L2 (A-3): sc-515816. Western blot analysis of CREB3L2 expression in MDA-MB-435S (A), Neuro-2A (B), Jurkat (C) and THP-1 (D) whole cell lysates and mouse testis tissue extract (E).

## SELECT PRODUCT CITATIONS

1. McCurdy, E.P., et al. 2019. Promotion of axon growth by the secreted end of a transcription factor. *Cell Rep.* 29: 363-377.

## STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.