

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

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CREB3L4 (h3): 293T Lysate: sc-177091



The Power to Question

BACKGROUND

cAMP responsive element-binding protein 3-L4 (CREB3L4), also known as AlbZIP, is a transcriptional activator that binds to DNA and is thought to be involved in the unfolded protein response. Expressed primarily in luminal epithelial cells of the prostate, as well as in breast and skeletal tissue, CREB3L4 binds as a dimer to the UPR element (UPRE) of DNA where it activates transcription. Induction of CREB3L4 is regulated by androgens, compounds found in males which, when present in high amounts, signal overexpression of CREB3L4. High levels of stress in the endoplasmic reticulum (ER) trigger the release and translocation of the N-terminal domain of CREB3L4 from the ER membrane to the nucleus, allowing the protein to access the DNA and activate transcription. Increased levels of CREB3L4 are found in prostatic cancers, suggesting a possible role in tumor formation.

REFERENCES

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- 4. Adham, I.M., et al. 2005. Reduction of spermatogenesis but not fertility in CREB3L4-deficient mice. Mol. Cell. Biol. 25: 7657-7664.
- 5. El-Alfy, M., et al. 2006. Stage-specific expression of the Atce1/Tisp40 α isoform of CREB3L4 in mouse spermatids. J. Androl. 27: 686-694.
- Ben Aicha, S., et al. 2007. Transcriptional profiling of genes that are regulated by the endoplasmic reticulum-bound transcription factor AlbZIP/CREB3L4 in prostate cells. Physiol. Genomics 31: 295-305.
- 7. Levesque, M.H., et al. 2007. Evaluation of AlbZIP and Cdc47 as markers for human prostatic diseases. Urology 69: 196-201.
- 8. Labrie, C., et al. 2008. Androgen-regulated transcription factor AlbZIP in prostate cancer. J. Steroid Biochem. Mol. Biol. 108: 237-244.

CHROMOSOMAL LOCATION

Genetic locus: CREB3L4 (human) mapping to 1q21.3.

PRODUCT

CREB3L4 (h3): 293T Lysate represents a lysate of human CREB3L4 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

CREB3L4 (h3): 293T Lysate is suitable as a Western Blotting positive control for human reactive CREB3L4 antibodies.

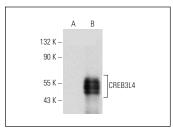
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

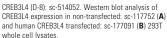
CREB3L4 (D-8): sc-514052 is recommended as a positive control antibody for Western Blot analysis of enhanced human CREB3L4 expression in CREB3L4 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

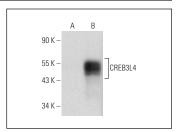
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG κ BP-HRP: sc-516102 or m-lgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA







CREB314 (D-6): sc-390850. Western blot analysis of CREB314 expression in non-transfected: sc-117752 (A) and human CREB314 transfected: sc-177091 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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

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