SANTA CRUZ BIOTECHNOLOGY, INC.

EWS (h): 293T Lysate: sc-128558

BACKGROUND

EWS is a nuclear RNA-binding protein. As a result of chromosome translocation, the EWS gene is fused to a variety of transcription factors, including ATF-1, in human neoplasias. In the Ewing family of tumors, the N-terminal domain of EWS is fused to the DNA-binding domain of various ETS transcription factors, including Fli-1, Erg, ETV1, E1AF and FEV. The EWS/Fli-1 chimeric protein acts as a more potent transcriptional activator than Fli-1 and can promote cell transformation. Two functional regions have been identified in EWS. An amino-terminal region (domain A) has little transactivation activity, but transforms efficiently when fused to Fli-1. A distal region (domain B) shows transactivation activity, but transforms less efficiently when fused to Fli-1.

REFERENCES

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2. May, W.A., et al. 1993. The Ewing's sarcoma EWS/Fli-1 fusion gene encodes a more potent transcriptional activator and is a more powerful transforming gene than Fli-1. Mol. Cell. Biol. 13: 7393-7398.
3. Sorenson, P.H., et al. 1994. A second Ewing's sarcoma translocation, t(21;22), fuses the EWS gene to another Ets-family transcription factor, Erg. Nat. Genet. 6: 146-151.
4. Lessnick, S.L., et al. 1995. Multiple domains mediate transformation by the Ewing's sarcoma EWS/Fli-1 fusion gene. Oncogene 10: 423-431.
5. Jeon, I.S., et al. 1995. A variant Ewing's sarcoma translocation (7;22) fuses the EWS gene to the Ets gene ETV1. Oncogene 10: 1229-1234.
6. Fujimura, Y., et al. 1996. The EWS-ATF-1 gene involved in malignant melanoma of soft parts with t(12;22) chromosome translocation, encodes a contitutive transcriptional activator. Oncogene 12: 159-167.
7. Kaneko, Y., et al. 1997. EWS-Erg fusion transcript produced by chromosomal insertion in a Ewing sarcoma. Genes Chromosomes Cancer 18: 228-231.
8. Peter, M., et al. 1997. A new member of the Ets family fused to EWS in Ewing tumors. Oncogene 14: 1159-1164.

CHROMOSOMAL LOCATION

Genetic locus: EWSR1 (human) mapping to 22q12.2.

PRODUCT

EWS (h): 293T Lysate represents a lysate of human EWS 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

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

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

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.