SANTA CRUZ BIOTECHNOLOGY, INC.

ENX-1 (T-20): sc-17270

BACKGROUND

In *Drosophila,* the Polycomb (PcG) gene family encodes chromatin proteins that are required for the repression of homeotic loci in embryonic development. PcG proteins work in conjunction with the trithorax-group (trxG), which activate homeobox gene expression during embryonic development. ENX-1, a mammalian homolog of the *Drosophila* gene enhancer of zeste, is a PcG protein that is ubiquitously expressed during early embryogenesis and becomes restricted to the central and peripheral nervous systems and sites of fetal hematopoiesis during later development. In the adult, ENX-1 is restricted to specific sites, including spleen, testis and placenta. The gene encoding human ENX-1 transcribes a 746 amino acid polypeptide which contains a trithorax-like domain and a DNA-binding motif. ENX-1 interacts with the proto-oncogene product Vav and is thought to be involved in the proliferation of normal and malignant hematopoietic cells. By altering the regulation of target genes, ENX-1 may also contribute to certain phenotypes of Down syndrome.

REFERENCES

1. Goebl, M.G. 1991. The Bmi-1 and Mel-18 gene products define a new family of DNA-binding proteins involved in cell proliferation and tumorigenesis. Cell 66: 623.
2. Hobert, O., et al. 1996. Isolation and developmental expression analysis of Enx-1, a novel mouse Polycomb group gene. Mech. Dev. 55: 171-184.
3. Hobert, O., et al. 1996. Interaction of Vav with ENX-1, a putative transcriptional regulator of homeobox gene expression. Mol. Cell. Biol.16: 3066-3073.

CHROMOSOMAL LOCATION

Genetic locus: EZH2 (human) mapping to 7q36.1; Ezh2 (mouse) mapping to 6 B2.3.

SOURCE

ENX-1 (T-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ENX-1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-17270 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-17270 X, 200 µg/0.1 ml.

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.

APPLICATIONS

ENX-1 (T-20) is recommended for detection of ENX-1 of mouse, rat and 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

ENX-1 (T-20) is also recommended for detection of ENX-1 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for ENX-1 siRNA (h): sc-35312, ENX-1 siRNA (m): sc-156000, ENX-1 shRNA Plasmid (h): sc-35312-SH, ENX-1 shRNA Plasmid (m): sc-156000-SH, ENX-1 shRNA (h) Lentiviral Particles: sc-35312-V and ENX-1 shRNA (m) Lentiviral Particles: sc-156000-V.

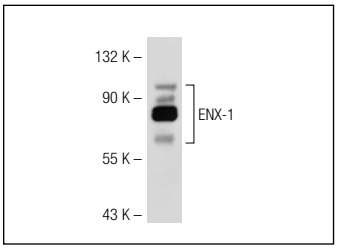
ENX-1 (T-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight (predicted) of ENX-1: 85 kDa.

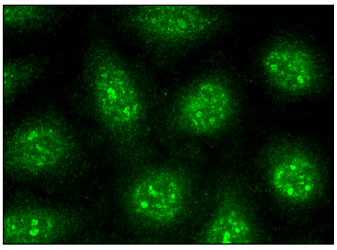
Molecular Weight (observed) of ENX-1: 81-102 kDa.

Positive Controls: JAR cell lysate: sc-2276, HeLa whole cell lysate: sc-2200 or mouse brain extract: sc-2253.

DATA



ENX-1 (T-20): sc-17270. Western blot analysis of ENX-1 expression in mouse brain tissue extract.



ENX-1 (T-20): sc-17270. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

SELECT PRODUCT CITATIONS

1. Su, I.H., et al. 2005. Polycomb group protein ezh2 controls actin polymerization and cell signaling. Cell 121: 425-436.
2. Jacob, E., et al. 2011. Dual function of polycomb group proteins in differentiated murine T helper (CD4+) cells. J. Mol. Signal. 6: 5.

PROTOCOLS

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