SANTA CRUZ BIOTECHNOLOGY, INC.

ENX-2 (H-97): sc-292275



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) proteins, 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. ENX-2 is another mammalian homolog of the *Drosophila* gene enhancer of zeste and contains one SET domain. The gene for human ENX-2 maps to chromosome 17q21.2. ENX-2 expression is ubiquitous in adult and fetal tissue, where it may aid in maintaining heterochromatin stability.

REFERENCES

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- Abel, K.J., et al. 1996. Characterization of EZH1, a human homolog of Drosophila enhancer of zeste near BRCA1. Genomics 37: 161-171.
- Laible, G., et al. 1997. Mammalian homologues of the polycomb-group gene enhancer of zeste mediate gene silencing in *Drosophila* heterochromatin and at *S. cerevisiae telomeres*. EMBO J. 16: 3219-3232.
- 5. van Lohuizen, M., et al. 1998. Interaction of mouse polycomb-group (PcG) proteins Enx1 and Enx2 with EED: indication for separate PcG complexes. Mol. Cell. Biol. 18: 3572-3579.
- Sewalt, R.G., et al. 1998. Characterization of interactions between the mammalian polycomb-group proteins ENX-1/EZH2 and EED suggests the existence of different mammalian polycomb-group protein complexes. Mol. Cell. Biol. 18: 3586-3595.
- 7. Fukuyama, T., et al. 2000. Proliferative involvement of ENX-1, a putative human polycomb group gene, in haematopoietic cells. Br. J. Haematol. 108: 842-847.

CHROMOSOMAL LOCATION

Genetic locus: EZH1 (human) mapping to 17q21.2; Ezh1 (mouse) mapping to 11 D.

SOURCE

ENX-2 (H-97) is a rabbit polyclonal antibody raised against amino acids 164-260 mapping within an internal region of ENX-2 of human origin.

STORAGE

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

PRODUCT

Each vial contains 200 μ g lgG 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-292275 X, 200 μ g/0.1 ml.

APPLICATIONS

ENX-2 (H-97) is recommended for detection of ENX-2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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-2 (H-97) is also recommended for detection of ENX-2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ENX-2 siRNA (h): sc-38187, ENX-2 siRNA (m): sc-38188, ENX-2 shRNA Plasmid (h): sc-38187-SH, ENX-2 shRNA Plasmid (m): sc-38188-SH, ENX-2 shRNA (h) Lentiviral Particles: sc-38187-V and ENX-2 shRNA (m) Lentiviral Particles: sc-38188-V.

ENX-2 (H-97) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of ENX-2 isoforms 1/2/3/4/5: 85/86/81/77/69 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

RESEARCH USE

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

PROTOCOLS

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

MONOS Satisfation Guaranteed

Try ENX-2 (H-4): sc-515817 or ENX-2 (C-8): sc-398767, our highly recommended monoclonal alternatives to ENX-2 (H-97).