

ENX-1 (D-8): sc-137255

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.

CHROMOSOMAL LOCATION

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

SOURCE

ENX-1 (D-8) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 63-102 within an internal region of ENX-1 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} 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-137255 X, 200 µg/0.1 ml.

ENX-1 (D-8) is available conjugated to agarose (sc-137255 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-137255 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-137255 PE), fluorescein (sc-137255 FITC), Alexa Fluor[®] 488 (sc-137255 AF488), Alexa Fluor[®] 546 (sc-137255 AF546), Alexa Fluor[®] 594 (sc-137255 AF594) or Alexa Fluor[®] 647 (sc-137255 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-137255 AF680) or Alexa Fluor[®] 790 (sc-137255 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-137255 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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STORAGE

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

PROTOCOLS

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

APPLICATIONS

ENX-1 (D-8) is recommended for detection of ENX-1 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).

ENX-1 (D-8) is also recommended for detection of ENX-1 in additional species, including equine, canine, bovine and porcine.

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.

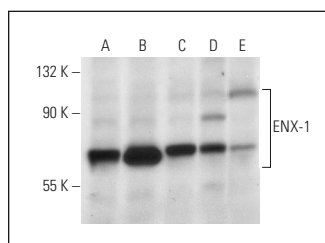
ENX-1 (D-8) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

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

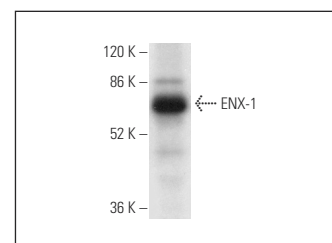
Molecular Weight (observed) of ENX-1: 81-102 kDa.

Positive Controls: human placenta extract: sc-363772, HeLa whole cell lysate: sc-2200 or NTERA-2 cl.D1 whole cell lysate: sc-364181.

DATA



ENX-1 (D-8): sc-137255. Western blot analysis of ENX-1 expression in HeLa (A), Hs 181 Tes (B), NTERA-2 cl.D1 (C), JAR (D) and F9 (E) whole cell lysates.



ENX-1 (D-8): sc-137255. Western blot analysis of ENX-1 expression in human placenta tissue extract.

SELECT PRODUCT CITATIONS

- Hervás-Corpión, I., et al. 2018. Early alteration of epigenetic-related transcription in Huntington's disease mouse models. *Sci. Rep.* 8: 9925.
- Subudhi, A., et al. 2020. Unraveling the role of H3K4 trimethylation and lncRNA HOTAIR in SATB1 and DUSP4-dependent survival of virulent *Mycobacterium tuberculosis* in macrophages. *Tuberculosis* 120: 101897.
- Kaundal, B., et al. 2022. Mitochondria-targeting nano therapy altering IDH2-mediated EZH2/EZH1 interaction as precise epigenetic regulation in glioblastoma. *Biomater. Sci.* 10: 5301-5317.
- Yang, B., et al. 2022. LINC00665 interacts with BACH1 to activate Wnt1 and mediates the M2 polarization of tumor-associated macrophages in GC. *Mol. Immunol.* 146: 1-8.

RESEARCH USE

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