BACKGROUND

Cdx1, Cdx2 and Cdx4 are members of the caudal-type homeobox family of genes, which are homologs of the Drosophila "caudal" gene required for anterior-posterior regional identity. The proteins encoded by these genes are transcription factors which play an important role in development by regulating the expression of Hox genes. Hox genes play a fundamental role in the development of the vertebrate central nervous system, heart, axial skeleton, limbs, gut, urogenital tract and external genitalia. Cdx4 is a major positive regulator of the expression of all Hox family members. Due to its critical role as a regulator, Cdx4 is a direct target of the canonical Wnt pathway. The loss of Cdx4 can result in the development of an expanded hindbrain, while the overexpression of Cdx4 may cause the hindbrain to lose its distinct segmental features and resemble the spinal cord.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: CDX4 (human) mapping to Xq13.2; Cdx4 (mouse) mapping to X D.

SOURCE

Cdx4 (H-4) is a mouse monoclonal antibody raised against amino acids 1-168 mapping at the N-terminus of Cdx4 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-374471 X, 200 µg/0.1 ml.

APPLICATIONS

Cdx4 (H-4) is recommended for detection of Cdx4 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 1:30-1:300).

Suitable for use as control antibody for Cdx4 siRNA (h): sc-72316, Cdx4 siRNA (m): sc-72317, Cdx4 shRNA Plasmid (h): sc-72316-SH, Cdx4 shRNA Plasmid (m): sc-72317-SH, Cdx4 shRNA (h) Lentiviral Particles: sc-72316-V and Cdx4 shRNA (m) Lentiviral Particles: sc-72317-V.

Cdx4 (H-4) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of Cdx4: 30 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Hep G2 cell lysate: sc-2227 or SK-N-MC nuclear extract: sc-2154.

DATA

STOREGAGE

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.

PROTOCOLS

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