Cdx4 (C-7): sc-374472

**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 over-expression 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 (C-7) 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 kappa light chain 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-374472 X, 200 µg/0.1 ml.

**APPLICATIONS**

Cdx4 (C-7) 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 (C-7) 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.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), 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 m-IgGκ BP-RTC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**DATA**

Cdx4 (C-7): sc-374472. Western blot analysis of Cdx4 expression in SK-N-MC nuclear extract (A) and SK-N-Sh (B), SH-SY5Y (C), MIB-2 (D) and Neuro-2A (E) whole cell lysates.

Cdx4 (C-7): sc-374472. Western blot analysis of Cdx4 expression in HeLa (A), OSi-2 (B) and Hep G2 (C) whole cell lysates and SK-N-MC nuclear extract (D).

**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.