

# HoxC8 (1H2): sc-517007

## BACKGROUND

The Hox proteins play a role in development and cellular differentiation by regulating downstream target genes. Specifically, the Hox proteins direct DNA-protein and protein-protein interactions that assist in determining the morphologic features associated with the anterior-posterior body axis. Homeobox region 3 contains at least seven homeoboxes in 160 kb of DNA, including Homeobox 8 (HoxC8) and Homeobox 3A (Hox3A). Overexpression of the HOXC8 transgene causes cartilage defects, the severity of which depends upon transgene dosage. This abnormal cartilage is characterized by an accumulation of proliferating chondrocytes and reduced maturation. Since HoxC8 is normally expressed in chondrocytes, it may be responsible for skeletal development other than pattern formation in a tissue-specific manner, hypothetically by controlling the progression of cells along the chondrocyte differentiation pathway.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: HOXC8 (human) mapping to 12q13.13; Hoxc8 (mouse) mapping to 15 F3.

## RESEARCH USE

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

## SOURCE

HoxC8 (1H2) is a mouse monoclonal antibody raised against amino acids 47-136 representing partial length HoxC8 of human origin.

## PRODUCT

Each vial contains 100 µg IgG<sub>1</sub> kappa light chain in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

HoxC8 (1H2) is recommended for detection of HoxC8 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

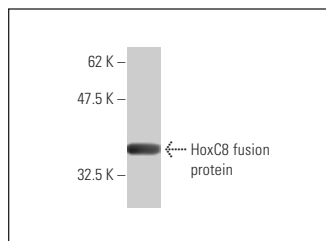
Suitable for use as control antibody for HoxC8 siRNA (h): sc-60806, HoxC8 siRNA (m): sc-60807, HoxC8 shRNA Plasmid (h): sc-60806-SH, HoxC8 shRNA Plasmid (m): sc-60807-SH, HoxC8 shRNA (h) Lentiviral Particles: sc-60806-V and HoxC8 shRNA (m) Lentiviral Particles: sc-60807-V.

Molecular Weight of HoxC8: 28 kDa.

## 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-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

## DATA



HoxC8 (1H2): sc-517007. Western blot analysis of human recombinant HoxC8 fusion protein.

## SELECT PRODUCT CITATIONS

1. Huang, Y., Chen, L. and Guo, A. 2018. Upregulated expression of HoxC8 is associated with poor prognosis of cervical cancer. *Oncol. Lett.* 15: 7291-7296.

## STORAGE

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