

HoxC8 (D-16): sc-49823

BACKGROUND

HoxC8 (homeobox protein Hox-C8, Hox-3A) is a 242 amino acid protein encoded by the human gene HOXC8. HoxC8 belongs to the Antp homeobox family and contains one homeobox DNA-binding domain. 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 within 160 kb of DNA. 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.

SOURCE

HoxC8 (D-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HoxC8 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-49823 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HoxC8 (D-16) is recommended for detection of HoxC8 (homeobox protein Hox-C8) of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

HoxC8 (D-16) is also recommended for detection of HoxC8 (homeobox protein Hox-C8) in additional species, including bovine and avian.

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.

HoxC8 (D-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of HoxC8: 28 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.

PROTOCOLS

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