

HoxC5 (1E10): sc-517171

BACKGROUND

The Hox homeobox genes encode proteins that are transcriptional regulators with an established role in embryonic development. HoxC5 (homeobox C5), also known as CP11, HOX3 or HOX3D, is a 222 amino acid protein that localizes to the nucleus and contains one homeobox DNA-binding domain. Existing as multiple alternatively spliced isoforms, HoxC5 functions as a sequence-specific DNA-binding transcription factor that is part of a regulatory mechanism that provides cells with positional identities during development. The gene encoding HoxC5 maps to a cluster of Hox proteins on chromosome 12 that are essential for morphogenesis. Encoding over 1,100 genes within 132 million bases, chromosome 12 makes up about 4.5% of the human genome. A number of skeletal deformities are linked to chromosome 12, including hypochondrogenesis, achondrogenesis and Kniest dysplasia.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: HOXC5 (human) mapping to 12q13.13; Hoxc5 (mouse) mapping to 15 F3.

SOURCE

HoxC5 (1E10) is a mouse monoclonal antibody raised against amino acids 1-68 representing partial length HoxC5 of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

HoxC5 (1E10) is recommended for detection of HoxC5 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).

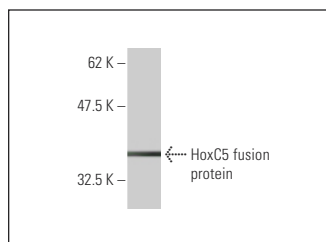
Suitable for use as control antibody for HoxC5 siRNA (h): sc-75287, HoxC5 siRNA (m): sc-75288, HoxC5 shRNA Plasmid (h): sc-75287-SH, HoxC5 shRNA Plasmid (m): sc-75288-SH, HoxC5 shRNA (h) Lentiviral Particles: sc-75287-V and HoxC5 shRNA (m) Lentiviral Particles: sc-75288-V.

Molecular Weight of HoxC5: 25 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, 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).

DATA



HoxC5 (1E10): sc-517171. Western blot analysis of human recombinant HoxC5 fusion protein.

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 for detailed protocols and support products.