

HoxC4 (N-20): sc-49986

BACKGROUND

Homeobox (Hox) genes, which share a highly conserved 183 bp sequence, encode proteins capable of binding to specific DNA sequences and functioning as transcription factors. During embryogenesis, HOX genes play a critical role in the spatial and temporal differentiation of cells. HoxC4, a sequence-specific transcription factor, belongs to the Antp Hox family and localizes to the nucleus. It functions as a part of a developmental regulatory system, providing cells with specific positional identities on the anterior-posterior axis. HoxC4 expression levels increase with differentiation of lymphoid cells, suggesting its role in the molecular regulation of hematopoiesis. HoxC4 is also expressed in differentiated keratinocytes.

REFERENCES

1. Rieger, E., et al. 1994. Expression of the homeobox gene HOXC4 in keratinocytes of normal skin and epithelial skin tumors is correlated with differentiation. *J. Invest. Dermatol.* 103: 341-346.
2. Meazza, R., et al. 1995. Expression of HoxC4 homeoprotein in the nucleus of activated human lymphocytes. *Blood* 85: 2084-2090.

CHROMOSOMAL LOCATION

Genetic locus: HOXC4 (human) mapping to 12q13.13; Hoxc4 (mouse) mapping to 15 F3.

SOURCE

HoxC4 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of HoxC4 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-49986 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HoxC4 (N-20) is recommended for detection of HoxC4 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)], 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).

HoxC4 (N-20) is also recommended for detection of HoxC4 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for HoxC4 siRNA (h): sc-60804, HoxC4 siRNA (m): sc-60805, HoxC4 shRNA Plasmid (h): sc-60804-SH, HoxC4 shRNA Plasmid (m): sc-60805-SH, HoxC4 shRNA (h) Lentiviral Particles: sc-60804-V and HoxC4 shRNA (m) Lentiviral Particles: sc-60805-V.

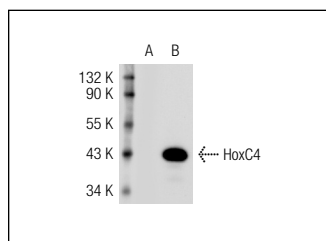
Molecular Weight of HoxC4: 30 kDa.

Positive Controls: HoxC4 (h): 293T Lysate: sc-116126.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



HoxC4 (N-20): sc-49986. Western blot analysis of HoxC4 expression in non-transfected: sc-117752 (A) and human HoxC4 transfected: sc-116126 (B) 293T whole cell lysates.

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.

MONOS
Satisfaction
Guaranteed

Try **HoxC4 (G-12): sc-398460** or **HoxC4 (RR-Y): sc-81965**, our highly recommended monoclonal alternatives to HoxC4 (N-20).