

HoxC4 (RR-Y): sc-81965

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

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CHROMOSOMAL LOCATION

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

SOURCE

HoxC4 (RR-Y) is a mouse monoclonal antibody raised against recombinant HoxC4 of human origin.

PRODUCT

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

APPLICATIONS

HoxC4 (RR-Y) 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

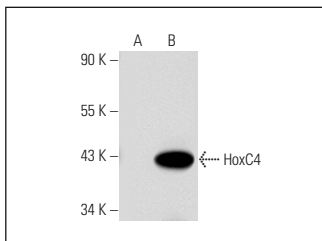
Molecular Weight of HoxC4: 30 kDa.

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

RECOMMENDED 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



HoxC4 (RR-Y): sc-81965. 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 for detailed protocols and support products.