HoxC12 (LX-O): sc-81966

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BACKGROUND

The homeobox (Hox) proteins are a family of transcription factors that 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. Hox proteins are involved in controlling axial patterning, leukemias and hereditary malformations. In mammals, there are four gene clusters encoding Hox proteins, namely HoxA, HoxB, HoxC and HoxD, that are located on different chromosomes, each consisting of 9-11 tandemly arranged genes. HoxC12 (homeobox C12), also known as Hox3, Hox3F or HOC3F, is a member of the Abd-B homeobox (Hox) family and is encoded by a gene from the HoxC cluster. HoxC12 is a 282 amino acid long nuclear protein that contains one homeobox DNA-binding domain.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: HOXC12 (human) mapping to 12q13.13; Hoxc12 (mouse) mapping to 15 F3.

SOURCE

HoxC12 (LX-O) is a mouse monoclonal antibody raised against recombinant HoxC12 of human origin.

PRODUCT

Each vial contains 50 µg IgG$_{2a}$ kappa light chain in 0.5 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

HoxC12 (LX-O) is recommended for detection of HoxC12 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 HoxC12 siRNA (h): sc-95877, HoxC12 siRNA (m): sc-146071, HoxC12 shRNA Plasmid (h): sc-95877-SH, HoxC12 shRNA Plasmid (m): sc-146071-SH, HoxC12 shRNA (h) Lentiviral Particles: sc-95877-V and HoxC12 shRNA (m) Lentiviral Particles: sc-146071-V.
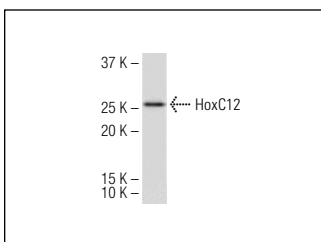
Molecular Weight of HoxC12: 30 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

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

HoxC12 (LX-O): sc-81966. Western blot analysis of HoxC12 expression in Jurkat whole cell lysate.

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.