BACKGROUND
The 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. HoxD11 (homeobox D11), also known as HOX4 or HOX4F, is a 338 amino acid protein that contains one homeobox DNA-binding domain and is a member of the Abd B homeobox family. Localized to the nucleus, HoxD11 functions as a sequence-specific transcription factor that, in conjunction with a variety of other proteins, provides cells with positional identities on their anterior-posterior axis. Defects in the gene encoding HoxD11 are associated with severe limb and genital abnormalities, suggesting that HoxD11 plays an important role in forelimb morphogenesis.

REFERENCES

CHROMOSOMAL LOCATION
Genetic locus: HOXD11 (human) mapping to 2q31.1; Hoxd11 (mouse) mapping to 2 C3.

SOURCE
HoxD11 (R-26) is a mouse monoclonal antibody raised against recombinant HoxD11 of human origin.

RESEARCH USE
For research use only, not for use in diagnostic procedures.

PRODUCT
Each vial contains 100 µg IgG2a kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS
HoxD11 (R-26) is recommended for detection of HoxD11 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:200-1:1000), 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).

Recommended Support Reagents:

DATA
Molecular Weight of HoxD11: 36 kDa. Positive Controls: Jurkat whole cell lysate: sc-2204, Jurkat nuclear extract: sc-2132 or LNCaP cell lysate: sc-2231.

STORAGE
Store at 4°C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

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