

HMX1 (N-14): sc-79523

BACKGROUND

The homeobox DNA-binding domain is a 60 amino acid motif that is conserved among many species and functions to bind DNA via a helix-turn-helix structure, thereby playing a role in transcriptional regulation and the control of gene expression. HMX1 (H6 family homeobox 1), also known as H6 or NKX5-3, is a 373 amino acid protein that localizes to the nucleus and contains one homeobox DNA-binding domain. Existing as a member of the HMX homeobox family, HMX1 functions as a DNA-binding protein that binds to the core 5'-CAAG-3' DNA sequence and is thought to function as a transcriptional repressor, possibly playing a role in the development of facial structures, including the eye and ear. Defects in the gene encoding HMX1 are the cause of oculoauricular syndrome, a condition characterized by ocular coloboma, retinal pigment epithelium abnormalities, rod-cone dystrophy and anomalies of the external ear.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: HMX1 (human) mapping to 4; Hmx1 (mouse) mapping to 5 B3.

SOURCE

HMX1 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of HMX1 of human origin.

STORAGE

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

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-79523 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HMX1 (N-14) is recommended for detection of HMX1 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).

Suitable for use as control antibody for HMX1 siRNA (h): sc-75269, HMX1 siRNA (m): sc-75270, HMX1 shRNA Plasmid (h): sc-75269-SH, HMX1 shRNA Plasmid (m): sc-75270-SH, HMX1 shRNA (h) Lentiviral Particles: sc-75269-V and HMX1 shRNA (m) Lentiviral Particles: sc-75270-V.

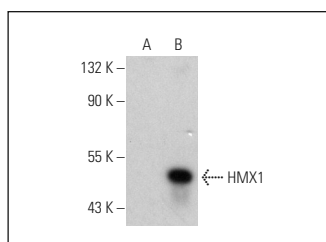
Molecular Weight of HMX1: 39 kDa.

Positive Controls: Y79 cell lysate: sc-2240, HMX1 (h): 293T Lysate: sc-172269 or Daudi cell lysate: sc-2415.

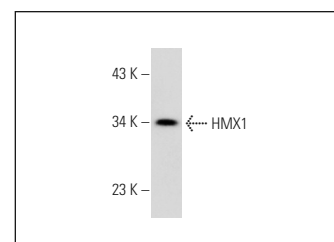
RECOMMENDED SECONDARY REAGENTS

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



HMX1 (N-14): sc-79523. Western blot analysis of HMX1 expression in non-transfected: sc-117752 (A) and human HMX1 transfected: sc-172269 (B) 293T whole cell lysates.



HMX1 (N-14): sc-79523. Western blot analysis of HMX1 expression in Y79 whole cell lysate.

RESEARCH USE

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