

HoxA9 (A-20): sc-17156

BACKGROUND

The HOX homeobox genes encode proteins that play a role in embryonic development. The HOXA9 gene encodes a class I homeodomain protein, which is expressed in normal adult and fetal thymic tissue, and may play a role in regulating early differentiation of thymocytes. The HOXA9 homeodomain protein cooperatively binds consensus DNA sequences with Meis1 and Pbx1. In addition, the HOXA9 protein, along with the MEIS1 and Pbx 1 proteins, have been implicated in leukemic transformation in both mice and humans. Furthermore, overexpression of both HoxA9 and Meis1 in primary bone marrow cells in syngenic mice induced growth factor-dependent acute myeloid leukemia (AML). Chromosomal translocation of t(7;11)(p15;p15) has been demonstrated in patients with human AML and chronic myelogenous leukemia (CML), resulting in the fusion gene NUP98-HOXA9. Mice transplanted with bone marrow cells expressing NUP98-HOXA9 acquire a myeloproliferative disease (MPD) which ultimately degrades to AML.

CHROMOSOMAL LOCATION

Genetic locus: HOXA9 (human) mapping to 7p15.2; Hoxa9 (mouse) mapping to 6 B3.

SOURCE

HoxA9 (A-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of HoxA9 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-17156 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-17156 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HoxA9 (A-20) is recommended for detection of HoxA9 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).

HoxA9 (A-20) is also recommended for detection of HoxA9 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for HoxA9 siRNA (h): sc-38682, HoxA9 siRNA (m): sc-38683, HoxA9 shRNA Plasmid (h): sc-38682-SH, HoxA9 shRNA Plasmid (m): sc-38683-SH, HoxA9 shRNA (h) Lentiviral Particles: sc-38682-V and HoxA9 shRNA (m) Lentiviral Particles: sc-38683-V.

HoxA9 (A-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

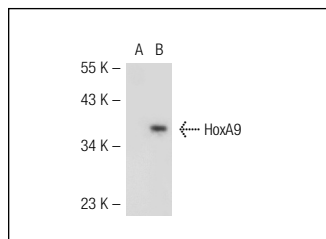
Molecular Weight of HoxA9: 36 kDa.

Positive Controls: SW480 cell lysate: sc-2219 or HoxA9 (m): 293T Lysate: sc-120885.

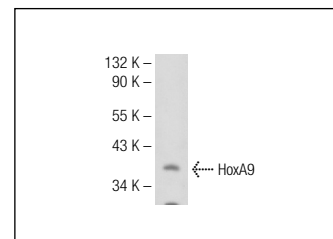
RECOMMENDED SECONDARY REAGENTS

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



HoxA9 (A-20): sc-17156. Western blot analysis of HoxA9 expression in non-transfected: sc-117752 (A) and mouse HoxA9 transfected: sc-120885 (B) 293T whole cell lysates.



HoxA9 (A-20): sc-17156. Western blot analysis of HoxA9 expression in SW480 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Lv, J., et al. 2012. Association of β -catenin, Wnt1, Smad4, Hoxa9, and Bmi-1 with the prognosis of esophageal squamous cell carcinoma. *Med. Oncol.* 29: 151-160.

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 **HoxA9 (HOX51043): sc-81291**, our highly recommended monoclonal alternative to HoxA9 (A-20).