

M33 (Y-23): sc-133768

BACKGROUND

Polycomb group (PcG) proteins form multiprotein complexes and play a role in gene silencing and Hox gene regulation by altering chromatin structure during transcription. The PcG protein M33, also known as CBX2 or MOD2, controls the accessibility of retinoic acid response elements in the vicinity of Hox genes regulatory regions by direct and/or indirect mechanisms. MPC2 and MPC3 are PcG proteins that show structural similarity to M33 and, like M33, bind the PcG protein RING1 through a conserved c-box motif located in the C-terminus of RING1. Both M33 and BMI-1 have an influence on positions effect variegation (PEV), which is the suppression of protein expression in a proportion of cells. M33 deficiency may cause sex reversal by interfering with steps upstream of the Y-chromosome-specific SRY gene. M33 may also be involved in two different pathologies: the campomelic syndrome, an inherited disorder, and neoplastic disorders linked to allele loss in this region.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CBX2 (human) mapping to 17q25.3; Cbx2 (mouse) mapping to 11 E2.

SOURCE

M33 (Y-23) is an affinity purified rabbit polyclonal antibody raised against synthetic M33 peptide of human origin.

PRODUCT

Each vial contains 50 μ g IgG in 500 μ l PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

M33 (Y-23) is recommended for detection of M33 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 M33 siRNA (h): sc-38189, M33 siRNA (m): sc-38190, M33 shRNA Plasmid (h): sc-38189-SH, M33 shRNA Plasmid (m): sc-38190-SH, M33 shRNA (h) Lentiviral Particles: sc-38189-V and M33 shRNA (m) Lentiviral Particles: sc-38190-V.

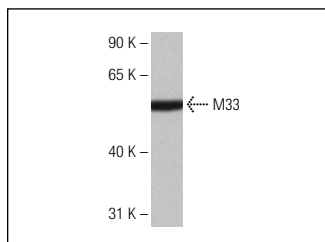
Molecular Weight of M33 isoforms: 56/23 kDa.

Positive Controls: human heart extract: sc-363763.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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).

DATA



M33 (Y-23): sc-133768. Western blot analysis of M33 expression in human heart tissue extract.

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.


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Try **M33 (34): sc-136387**, our highly recommended monoclonal alternative to M33 (Y-23).