



Mlx (h): 293 Lysate: sc-111152

BACKGROUND

Max is a nuclear localized bHLH-Zip protein that forms homodimers or heterodimers with Myc family members, including Myc, Mad 1, Mad 3, Mad 4, Mxi1 and Mnt (or Rox). These dimers bind to the E-box sequence CACGTG in order to regulate cell growth, proliferation and apoptosis. Mlx (Max-like protein X) is a bHLH-Zip protein that is structurally and functionally related to Max. Like Max, Mlx is broadly expressed in many tissues and has a long half-life. Mlx also forms homodimers or heterodimers with members of the Myc family, specifically Mad 1, Mad 4 and Rox, and members of the Mondo family, to repress or activate transcription from CACGTG E-boxes. MondoA forms weak homodimers and preferentially forms heterodimers with Mlx. The MondoA/Mlx complex is primarily localized to the cytoplasm, but will translocate to the nucleus in response to leptomycin B. Mlx can also dimerize with WBSCR14, a protein involved in Williams-Beuren syndrome (WBS), to repress E-box transcription, which provides further evidence that Mlx is a critical element in a transcription factor network.

REFERENCES

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4. Meroni, G., et al. 2000. Mlx, a new Max-like bHLH-Zip family member: the center stage of a novel transcription factors regulatory pathway? *Oncogene* 19: 3266-3277.
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CHROMOSOMAL LOCATION

Genetic locus: MLX (human) mapping to 17q21.2.

RESEARCH USE

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

PRODUCT

Mlx (h): 293 Lysate represents a lysate of human Mlx transfected 293 cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Mlx (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive Mlx antibodies. Recommended use: 10-20 µl per lane.

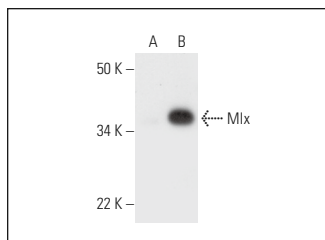
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

Mlx (F-12): sc-393086 is recommended as a positive control antibody for Western Blot analysis of enhanced human Mlx expression in Mlx transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

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, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Mlx (F-12): sc-393086. Western blot analysis of Mlx expression in non-transfected: sc-110760 (A) and human Mlx transfected: sc-111152 (B) 293 whole cell lysates.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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