

# MLF2 (H-130): sc-99231

## BACKGROUND

Myeloid leukemia factor (MLF) proteins typically demonstrate highest levels of expression in testis, ovary, skeletal muscle, heart, kidney and colon tissues, and lower levels of expression in spleen, thymus and peripheral blood leukocytes. MLF proteins play a role in normal hemopoietic differentiation as well as in erythroid/myeloid lineage switching. MLF2 is a ubiquitously expressed, 248 amino acid protein which shares 40% sequence identity with myeloid leukemia factor 1 (MLF1). MLF2 maps to chromosome 12p13.31, a region that is often associated with translocations in acute leukemias of lymphoid and myeloid origin. However, no alterations in the structure of the MLF2 locus in patients shown to have 12p translocations have been discovered.

## REFERENCES

1. Kuefer, M.U., et al. 1996. cDNA cloning, tissue distribution, and chromosomal localization of myelodysplasia/myeloid leukemia factor 2 (MLF2). *Genomics* 35: 392-396.
2. Fujimura, H. 1998. Growth inhibition of *Saccharomyces cerevisiae* by the immunosuppressant leflunomide is due to the inhibition of uracil uptake via Fur4p. *Mol. Gen. Genet.* 260: 102-107.
3. Ohno, K., et al. 2001. Characterization of a *Drosophila* homologue of leukemia factor (MLF). *Gene* 260: 133-143.
4. Shi, Y.W., et al. 2003. Gene expression profile changes in human multiple myeloma. *Hunan Yi Ke Da Xue Xue Bao* 28: 201-205.
5. Noé, V., et al. 2004. Epicatechin and a cocoa polyphenolic extract modulate gene expression in human Caco-2 cells. *J. Nutr.* 134: 2509-2516.
6. Kim, W.Y., et al. 2005. Evidence for sequestration of polyglutamine inclusions by *Drosophila* myeloid leukemia factor. *Mol. Cell. Neurosci.* 29: 536-544.

## CHROMOSOMAL LOCATION

Genetic locus: MLF2 (human) mapping to 12p13.31; Mlf2 (mouse) mapping to 6 F2.

## SOURCE

MLF2 (H-130) is a rabbit polyclonal antibody raised against amino acids 1-130 mapping at the N-terminus of MLF2 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.

## 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

MLF2 (H-130) is recommended for detection of MLF2 (myeloid leukemia factor 2) 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).

MLF2 (H-130) is also recommended for detection of MLF2 (myeloid leukemia factor 2) in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for MLF2 siRNA (h): sc-61059, MLF2 siRNA (m): sc-61060, MLF2 shRNA Plasmid (h): sc-61059-SH, MLF2 shRNA Plasmid (m): sc-61060-SH, MLF2 shRNA (h) Lentiviral Particles: sc-61059-V and MLF2 shRNA (m) Lentiviral Particles: sc-61060-V.

Molecular Weight (predicted) of MLF2: 28 kDa.

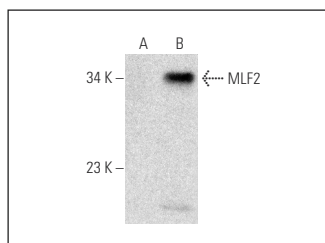
Molecular Weight (observed) of MLF2: 33 kDa.

Positive Controls: MLF2 (h): 293T Lysate: sc-110557, K-562 whole cell lysate: sc-2203 or Hep G2 cell lysate: sc-2227.

## 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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA



MLF2 (H-130): sc-99231. Western blot analysis of MLF2 expression in non-transfected: sc-117752 (A) and human MLF2 transfected: sc-110557 (B) 293T whole cell lysates.

## RESEARCH USE

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