SANTA CRUZ BIOTECHNOLOGY, INC.

# MLF2 (B-6): sc-166874

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## 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.


## CHROMOSOMAL LOCATION

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

## SOURCE

MLF2 (B-6) is a mouse monoclonal antibody raised against amino acids 1-130 mapping at the N-terminus of MLF2 of human origin.

## PRODUCT

Each vial contains 200 µg $IgG_{2b}$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

MLF2 (B-6) is recommended for detection of MLF2 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (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 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.

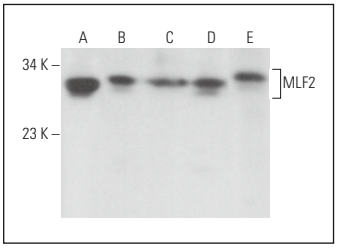
Molecular Weight (observed) of MLF2: 33 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, F9 cell lysate: sc-2245 or Neuro-2A whole cell lysate: sc-364185.

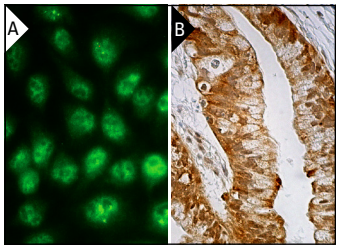
## RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA




MLF2 (B-6): sc-166874. Western blot analysis of MLF2 expression in NIH/3T3 (**A**), Neuro-2A (**B**), Caki-1 (**C**) and F9 (**D**) whole cell lysates and human cerebral cortex tissue extract (**E**).




MLF2 (B-6): sc-166874. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization (**A**). Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing nuclear and cytoplasmic staining of glandular cells (**B**).

## SELECT PRODUCT CITATIONS


1. Schludi, M.H., et al. 2017. Spinal poly-GA inclusions in a C9orf72 mouse model trigger motor deficits and inflammation without neuron loss. Acta Neuropathol. 134: 241-254.


## 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 for detailed protocols and support products.