10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

MLF1 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6716a

Product Information

Application	WB, E
Primary Accession	P58340
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB18642
Calculated MW	30627
Antigen Region	35-62

Additional Information

Gene ID	4291
Other Names	Myeloid leukemia factor 1, Myelodysplasia-myeloid leukemia factor 1, MLF1
Target/Specificity	This MLF1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 35-62 amino acids from the N-terminal region of human MLF1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MLF1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MLF1
Function	Involved in lineage commitment of primary hemopoietic progenitors by restricting erythroid formation and enhancing myeloid formation. Interferes with erythropoietin-induced erythroid terminal differentiation by preventing cells from exiting the cell cycle through suppression of CDKN1B/p27Kip1 levels. Suppresses COP1 activity via CSN3 which activates p53 and induces cell

	cycle arrest. Binds DNA and affects the expression of a number of genes so may function as a transcription factor in the nucleus.
Cellular Location	Cytoplasm {ECO:0000250|UniProtKB:Q9QWV4}. Nucleus {ECO:0000250|UniProtKB:Q9QWV4}. Cell projection, cilium {ECO:0000250|UniProtKB:Q9QWV4}. Cytoplasm, cytoskeleton, cilium basal body {ECO:0000250|UniProtKB:Q9QWV4}. Note=Shuttles between the cytoplasm and nucleus. {ECO:0000250|UniProtKB:Q9QWV4}
Tissue Location	Most abundant in testis, ovary, skeletal muscle, heart, kidney and colon. Low expression in spleen, thymus and peripheral blood leukocytes

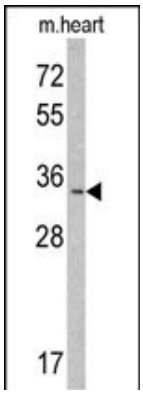
Background

MLF1 is involved in lineage commitment of primary hemopoietic progenitors by restricting erythroid formation and enhancing myeloid formation. The protein interferes with erythopoietin-induced erythroid terminal differentiation by preventing cells from exiting the cell cycle through suppression of CDKN1B/p27Kip1 levels. It suppresses RFWD2/COP1 activity via CSN3 which activates p53 and induces cell cycle arrest. It binds DNA and affects the expression of a number of genes so may function as a transcription factor in the nucleus.

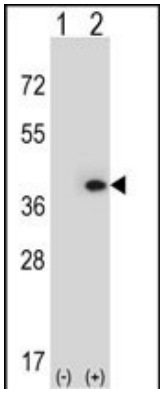
References

Li,Z.F., J. Neurol. Sci. 264 (1-2), 77-86 (2008)
Yoneda-Kato,N., EMBO J. 24 (9), 1739-1749 (2005)

Images



Western blot analysis of MLF1 Antibody (N-term) (Cat. #AP6716a) in mouse heart tissue lysates (35ug/lane). MLF1 (arrow) was detected using the purified Pab.



Western blot analysis of MLF1 (arrow) using rabbit polyclonal MLF1 Antibody (N-term) (Cat. #AP6716a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the MLF1 gene.