



Rabbit Anti-MLF1/MLF2 antibody

SL9179R

Product Name:	MLF1/MLF2
Chinese Name:	髓细胞性白血病蛋白1抗体
Alias:	Hls7; MLF1; MLF2; MLF3; MLF1_HUMAN; Myelodysplasia myeloid leukemia factor 1; Myelodysplasia-myeloid leukemia factor 1; Myeloid leukemia factor 1; myeloid leukemia factor 1 variant 1; myeloid leukemia factor 1 variant 2; myeloid leukemia factor 1 variant 3.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Pig,Cow,Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:50-200 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	31kDa
Cellular localization:	The nucleocytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human MLF1/2/3:165-268/268
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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 RFD2/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.

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 RFW2/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.

Subunit:

Interacts with MLF1IP. Also interacts with NRB1/MADM, YWHAZ/14-3-3-zeta and HNRPUL2/MANP. NRB1 recruits a serine kinase which phosphorylates both itself and MLF1. Phosphorylated MLF1 then binds to YWHAZ and is retained in the cytoplasm. Retained in the nucleus by binding to HNRPUL2. Binds to COPS3/CSN3 which is required for suppression of RFW2 and activation of p53.

Subcellular Location:

Cytoplasm. Nucleus. In non-hematopoietic cells, resides primarily in the cytoplasm with some punctate nuclear localization. Shuttles between the cytoplasm and nucleus. In hematopoietic cells, located preferentially in the nucleus. Found in the nucleolus when fused to NPM.

Tissue Specificity:

Most abundant in testis, ovary, skeletal muscle, heart, kidney and colon. Low expression in spleen, thymus and peripheral blood leukocytes.

Post-translational modifications:

Phosphorylation is required for binding to YWHAZ (By similarity).

DISEASE:

Note=A chromosomal aberration involving MLF1 is a cause of myelodysplastic syndrome (MDS). Translocation t(3;5)(q25.1;q34) with NPM1/NPM.

Similarity:

Belongs to the MLF family.

SWISS:

Q71F23

Gene ID:

79682

Database links:

[Entrez Gene: 79682](#)Human

[Entrez Gene: 71876](#)Mouse

[Entrez Gene: 306464](#)Rat

[Omim: 611511](#)Human

[SwissProt: Q2KIW5](#)Cow

[SwissProt: Q71F23](#)Human

[SwissProt: Q8C4M7](#)Mouse

[SwissProt: Q4V8G7](#)Rat

[Unigene: 575032](#)Human

[Unigene: 217385](#)Mouse

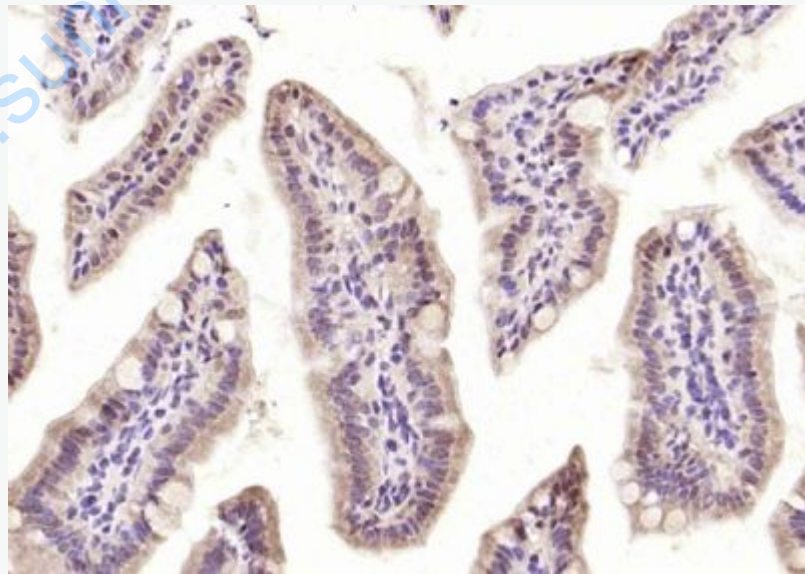
[Unigene: 22108](#)Mouse

[Unigene: 128609](#)Rat

Important Note:

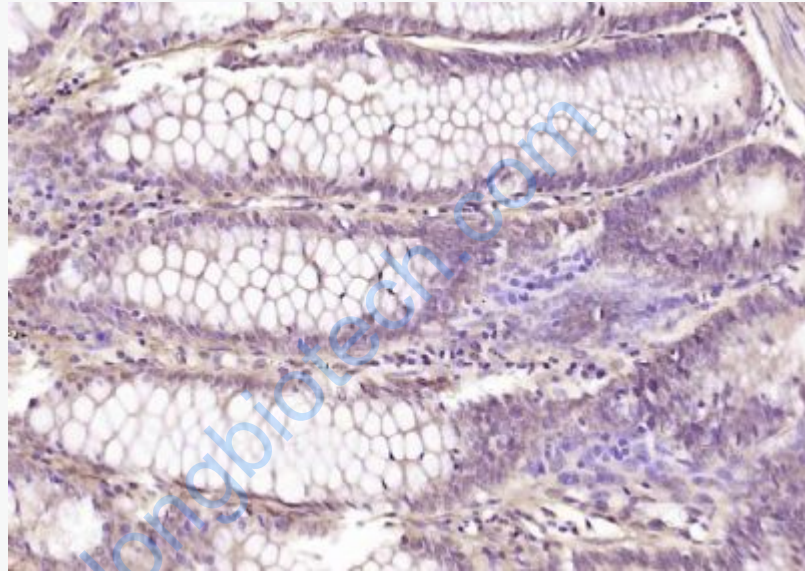
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Picture:

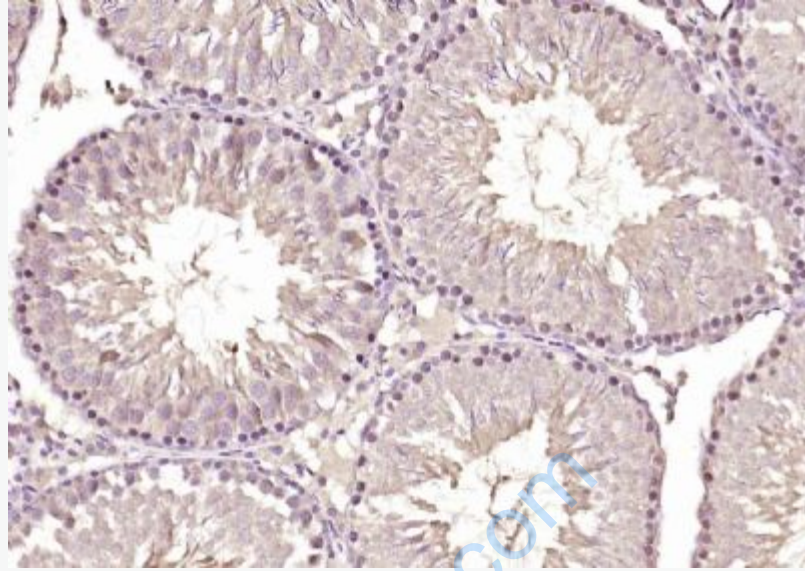


Paraformaldehyde-fixed, paraffin embedded (mouse intestine); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by

3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (MLF1) Polyclonal Antibody, Unconjugated (SL9179R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (human colon carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (MLF1) Polyclonal Antibody, Unconjugated (SL9179R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat testis); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (MLF1) Polyclonal Antibody, Unconjugated (SL9179R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.