

Anti-MLF1 Interacting Protein (C-terminal specific) (RABBIT) Antibody - 600-401-A91S

Code: 600-401-A91S

Size: 25 µL

Product Description: Anti-MLF1 Interacting Protein (C-terminal specific) (RABBIT) Antibody - 600-401-A91S

Concentration: 1.0 mg/mL by UV absorbance at 280 nm

PhysicalState: Liquid (sterile filtered)

Label	Unconjugated
Host	Rabbit
Gene Name	CENPU
Species Reactivity	human
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Stabilizer	None
Preservative	0.01% (w/v) Sodium Azide
Storage Condition	Store vial at -20° C or below prior to opening. This vial contains a relatively low volume of reagent (25 µL). To minimize loss of volume dilute 1:10 by adding 225 µL of the buffer stated above directly to the vial. Recap, mix thoroughly and briefly centrifuge to collect the volume at the bottom of the vial. Use this intermediate dilution when calculating final dilutions as recommended below. Store the vial at -20°C or below after dilution. Avoid cycles of freezing and thawing.
Synonyms	rabbit anti-MLF1 pT78 antibody, rabbit anti-MLF1 Interacting Protein pT78 antibody, Centromere protein U, CENP-U, Centromere protein of 50 kDa, CENP-50, Interphase centromere complex protein 24, KSHV latent nuclear antigen-interacting protein 1, MLF1-interacting protein, Polo-box-interacting protein 1, ICEN24, PBIP1, KLIP1
Application Note	This affinity purified antibody has been tested for use in ELISA, Immunohistochemistry, and western blotting. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 65 kDa in size corresponding to MLF1IP protein by western blotting in the appropriate cell lysate or extract.
Background	This antibody is designed, produced, and validated as part of a collaboration between Rockland and the National Cancer Institute (NCI) and is suitable for Cancer, Immunology and Nuclear Signaling research. Myeloid leukemia factor-1 (MLF1) Interacting Protein (also known as PBIP1, MLF1IP1, KLIP1 or KSHV latent nuclear antigen interacting protein 1) is a novel polo-like kinase 1 (Plk1) substrate. Plk1 phosphorylation of MLF1IP induces ubiquitination and degradation of MLF1IP prior to the metaphase/anaphase transition. Several Plk1-dependent phosphorylation sites have been identified on MLF1IP by mass spectrometry. Mutations of these sites stabilize MLF1IP and inhibit mitotic progression. Subsequent in vitro and in vivo MLF1IP phosphorylation and stability assays have revealed that phosphorylation of Thr78 is critical for triggering Plk1-dependent MLF1IP degradation. Expression of a non-degradable Thr78Ala mutant was sufficient to induce a mitotic block. Timely phosphorylation of MLF1IP on Thr78 by Plk1 is critical for eliminating the MLF1IP-imposed mitotic block prior to anaphase onset. MLF1IP is speculated to be a novel tumor suppressor, whose function is required for proper sister-chromatid separation. Loss of MLF1IP function may result in improper segregation of chromosomes and genomic instability, thus promoting tumorigenesis.
Purity And Specificity	This affinity purified antibody is directed against human MLF1IP protein. The product was affinity purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis was used to suggest cross-reactivity with MLF1IP protein from human, chimpanzee (98%), horse (72%), bovine (69%), dog (65%), mouse (56%), rat (55%) and chicken (47%) sources based on homology with the immunizing sequence. Reactivity against homologues from other sources is not known.
Assay Dilutions	User Optimized
ELISA	1:650,000
Western Blot	1:500- 1:2,000
Immunohistochemistry	5µg/mL
Other Assays	User Optimized
Expiration	Expiration date is three (3) months from date of opening.
Immunogen	This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a 418 residue recombinant protein corresponding to the carboxy terminal end of human MLF1IP protein.

General Reference

Hanissian, S.H., Teng, B., Akbar, U., Janjetovic, Z., Zhou, Q., Duntsch, C. and Robertson, J.H. (2005) Regulation of myeloid leukemia factor-1 interacting protein (MLF1IP) expression in glioblastoma. *Brain Res.* 1047 (1), 56-64. Hanissian, S.H., Akbar, U., Teng, B., Janjetovic, Z., Hoffmann, A., Hitzler, J.K., Iscove, N., Hamre, K., Du, X., Tong, Y., Mukatira, S., Robertson, J.H. and Morris, S.W. (2004) cDNA cloning and characterization of a novel gene encoding the MLF1-interacting protein MLF1IP. *Oncogene* 23 (20), 3700-3707. Pan, H.Y., Zhang, Y.J., Wang, X.P., Deng, J.H., Zhou, F.C. and Gao, S.J. (2003) Identification of a novel cellular transcriptional repressor interacting with the latent nuclear antigen of Kaposi's sarcoma-associated herpesvirus. *J. Virol.* 77 (18), 9758-9768.

Related Products

200-301-268	Anti-AKT pS473 (MOUSE) Monoclonal Antibody - 200-301-268
610-4302	Anti-MOUSE IgG (H&L) (RABBIT) Antibody Peroxidase Conjugated - 610-4302
611-1302	Anti-RABBIT IgG (H&L) (GOAT) Antibody Peroxidase Conjugated - 611-1302
B304	NORMAL GOAT SERUM (NGS) - B304

Related Links

NCBI - 38016935

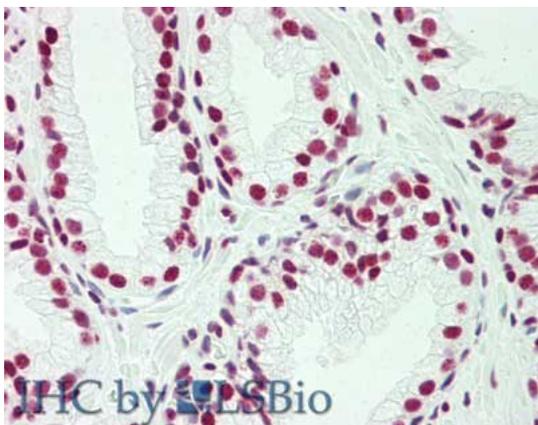
<http://www.ncbi.nlm.nih.gov/protein/38016935>

UniProtKB - <http://www.uniprot.org/uniprot/Q71F23>

GeneID - 79682

Images

- 1 Immunohistochemistry of rabbit anti-Pogz antibody. Tissue: prostate. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: Anti-Pogz at 5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Staining: Pogz as precipitated red signal with hematoxylin purple nuclear counterstain.



- 2 Western blot using Rockland's affinity purified anti-MLF1IP antibody shows detection of endogenous MLF1IP protein (a tier of four modified protein bands indicated by the arrowheads) in lysates of HeLa cells treated with control luciferase shRNA (lane 1), and detection of MLF1IP in HeLa cells transfected with MLF1IP (lane 3). Lane 2: HeLa cells treated with MLF1IP shRNA. The identity of the lower molecular weight bands is unknown. Primary antibody was used at 1:1,000. Personal Communication, K.S. Lee, NCI, Bethesda, MD.



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