

Datasheet for 600-401-923**MLF1 Antibody****Overview**

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| Description: | Anti-MLF1 Interacting Protein (internal) (RABBIT) Antibody - 600-401-923 |
| Item No.: | 600-401-923 |
| Size: | 100 µg |
| Applications: | ELISA, WB |
| Reactivity: | Human, Bovine, Chimpanzee, Dog |
| Host Species: | Rabbit |

Product Details

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.

Synonyms: rabbit anti-MLF1 antibody, rabbit anti-MLF1 Interacting Protein 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

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| Host Species: | Rabbit |
| Clonality: | Polyclonal |
| Format: | IgG |

Target Details

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| Gene Name: | CENPU |
| Reactivity: | Human, Bovine, Chimpanzee, Dog |
| Immunogen Type: | Conjugated Peptide |
| Immunogen: | This affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic peptide corresponding to amino acids surrounding Thr78 of human MLF1IP protein. |
| Purity/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, dog, bovine and chimpanzee based on 100% homology with the immunizing sequence. Expect partial reactivity with homologues from rat and mouse (90% homology). Reactivity against homologues from other sources is not known. This antibody reacts with MLF1IP protein that is either phosphorylated or non-phosphorylated at Thr78. |
| Relevant Links: | <ul style="list-style-type: none">• NCBI - 38016935• UniProtKB - Q71F23• GenelD - 79682 |

Application Details

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| Tested Applications: | ELISA, WB |
| Application Note: | This affinity purified antibody has been tested for use in ELISA 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. |
| Assay Dilutions: | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below. |
| ELISA: | 1:5,000 - 1:25,000 |
| IHC: | User Optimized |
| WB: | 1:500- 1:2,000 |

Formulation

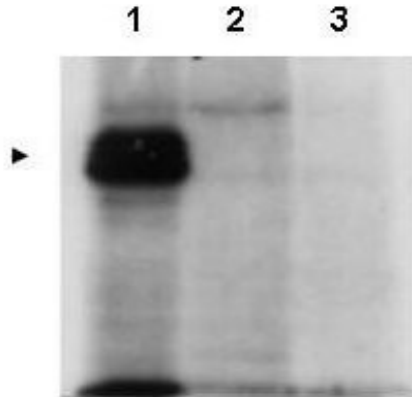
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| Physical State: | Liquid (sterile filtered) |
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| Concentration: | 1.06 mg/mL by UV absorbance at 280 nm |
| Buffer: | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 |
| Preservative: | 0.01% (w/v) Sodium Azide |
| Stabilizer: | None |

Shipping & Handling

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| Shipping Condition: | Dry Ice |
| Storage Condition: | Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. |
| Expiration: | Expiration date is one (1) year from date of receipt. |

Images



Western Blot

Western blot using Rockland's affinity purified anti-MLF1IP antibody shows detection of MLF1IP (arrowhead) in HeLa cells transfected with ZZ-tagged MLF1IP (Lane 1). Lane 2 is lysate from non-transfected HeLa cells, and Lane 3 is lysate from HeLa cells containing a knock-out mutation for PBIP1/MLF1IP. Personal Communication, Kyung S. Lee, CCR-NCI, Bethesda, MD.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.