Datasheet for ABIN349586

anti-MLF1IP antibody (C-Term)

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Overview

Quantity:	100 µg
Target:	MLF1IP
Binding Specificity:	C-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Application:	Western Blotting (WB), ELISA, Immunohistochemistry (IHC)

Product Details

Purpose:	MLF1IP / PBIP1 Antibody
Immunogen:	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. Immunogen Type: Recombinant Protein
Isotype:	IgG
Cross-Reactivity (Details):	This affinity purified antibody is directed against human MLF1IP protein.
Characteristics:	Synonyms: rabbit anti-MLF1IP/PBIP1 antibody, rabbit anti-MLF1IP antibody, rabbit anti-PBIP1 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
Purification:	The product was affinity purified from monospecific antiserum by immunoaffinity

Product Details

	chromatography.
Sterility:	Sterile filtered

Target Details

Target:	MLF1IP
Alternative Name:	CENPU (MLF1IP Products)
Background:	Background: This antibody is designed, produced, and validated as part of a collaboration with 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.
Gene ID:	79682, 38016935
UniProt:	Q71F23

Application Details

Application Notes:	Immunohistochemistry Dilution: User Optimized 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. Western Blot Dilution: 1:500- 1:2,000 ELISA Dilution: 1:650,000 Other: User Optimized

Application Details

Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1.0 mg/mL
Buffer:	Buffer: 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 Stabilizer: None Preservative: 0.01 % (w/v) Sodium Azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	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.
Expiry Date:	12 months

Images

Western Blotting

Image 1. Western blot using 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.