MLL1 Antibody

Rabbit Polyclonal

Antigen Affinity Purified

Catalog No. A300-374A

Lot No. A300-374A-5

Protein ID Q03164

GeneID 4297

APPLICATIONS	WB, IP, ChIP, ChIP-chip
SPECIES REACTIVITY	Human
PRESUMED REACTIVITY	Based on 100% sequence identity, this antibody is predicted to react with Mouse
AMOUNT	100 µl
CONCENTRATION	1000 µg/ml
STORAGE/SHELF LIFE	2 - 8° C / 1 year from date of receipt
PHYSICAL STATE	Liquid
BUFFER	Tris-citrate/phosphate buffer, pH 7 to 8 containing 0.09% Sodium Azide
ISOTYPE	IgG
ORIGIN	USA

PRODUCTION PROCEDURES

Antibody was affinity purified using an epitope specific to MLL1 immobilized on solid support.

The epitope recognized by A300-374A maps to a region between residues 2725 and 2775 of human myeloid/lymphoid or mixed-lineage leukemia 1 using the number given in Swiss-Prot entry Q03164 (GeneID 4297). The epitope is found in the C-terminal 180 kDa fragment generated by proteolytic cleavage. The epitope is found in isoform 14P-18B of MLL1.

Immunoglobulin concentration was determined by extinction coefficient: absorbance at 280 nm of 1.4 equals 1.0 mg of IgG.

APPLICATIONS

Centrifuge tube to remove product from lid. Optimal working dilutions should be determined experimentally by the investigator. Prepare working dilution immediately before use.

Western Blot	1:2,000 - 1:10,000
Immunoprecipitation	2 -5 µg/mg lysate
ChIP	1 - 5 µg. Previous lots of this antibody have performed in this application.
ChIP-chip	10 µg. Previous lots of this antibody have performed in this application.

APPLICATION NOTES

Western blot of immunoprecipitates performed using Normal Pig Serum (Cat. No. S100-020), Goat anti-Rabbit Light Chain HRP Conjugate (Cat. No. A120-113P) and 3-8% SDS-PAGE (link to IP-western blot protocol in Additional Info section below).

Western blot of lysates performed using standard western blot reagents and 3-8% SDS-PAGE.

ADDITIONAL INFO

https://www.bethyl.com/product/A300-374A

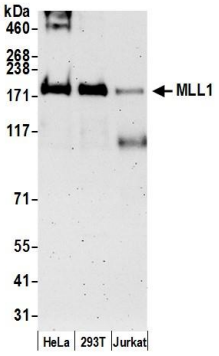
Use the link above to view SDS, a current list of citations, and other product specific information.

IP-western blot protocol: https://www.bethyl.com/content/protocol_IP_WB

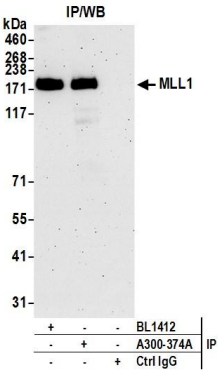
This document certifies that this product has met all of the quality control standards defined by Bethyl Laboratories, Inc.

Eric McIntush, PhD | Chief Scientific Officer

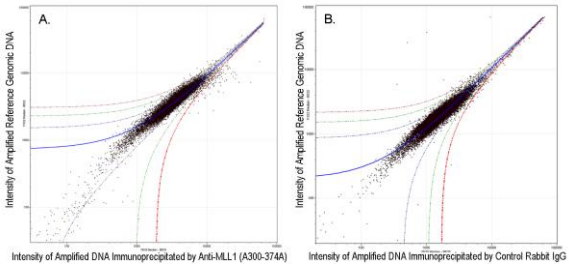
Date: June 21, 2019



Detection of human MLL1 by western blot. *Samples:* Whole cell lysate (50 µg) from HeLa, HEK293T, and Jurkat cells prepared using NETN lysis buffer. *Antibody:* Affinity purified rabbit anti-MLL1 antibody A300-374A (lot A300-374A-5) used for WB at 0.1 µg/ml. *Detection:* Chemiluminescence with an exposure time of 3 minutes.



Detection of human MLL1 by western blot of immunoprecipitates. *Samples:* Whole cell lysate (1.0 mg per IP reaction; 20% of IP loaded) from HEK293T cells prepared using NETN lysis buffer. *Antibodies:* Affinity purified rabbit anti-MLL1 antibody A300-374A (lot A300-374A-5) used for IP at 3 µg per reaction. MLL1 was also immunoprecipitated by rabbit anti-MLL1 antibody BL1412. For blotting immunoprecipitated MLL1, A300-374A was used at 1 µg/ml. *Detection:* Chemiluminescence with an exposure time of 3 minutes.



ChIP-chip scatter plot of anti-MLL1 (A300-374A) enriched DNA binding sites versus input reference DNA. A. 10 µg of A300-374A was used to immunoprecipitate chromatin from K-562 cells according to Ren et al (Genes Dev. 2002 16: 245-256). immunoprecipitatesd DNA and reference DNA were amplified via ligation-mediated PCR and the products labeled with fluorescent dUTPs. The labeled ChIP and reference DNA were pooled, hybridized to a DNA microarray, and analyzed. Data points below the +3 SD curve (red line) represent significantly enriched binding sites. B. As a control, a similar experiment was performed using normal rabbit IgG. Compared to the anti-MLL1 ChIP, normal rabbit IgG showed little enrichment.