

Anti-MLL N-Terminus Monoclonal Antibody

ORDERING INFORMATION

Catalog no.: 34041

Size: 100ug Protein G-purified antibody in PBS, pH 7.4.

BACKGROUND

MLL (Mixed Lineage Leukemia) is a proto-oncogene that is mutated in a variety of acute leukemias. *MLL* is proteolytically processed into 2 fragments, *MLL^N* and *MLL^C*, that display opposite transcriptional properties. Processed *MLL^N* and *MLL^C* associate with each other via N-terminal and C-terminal intramolecular interaction domains. *MLL* processing occurs rapidly after translation and is followed by phosphorylation of *MLL^C*. *MLL^N* displays transcriptional repression activity, whereas *MLL^C* has strong transcriptional activation properties. Leukemia-associated *MLL* fusion proteins lack the *MLL* processing sites, do not undergo cleavage, and are unable to interact with *MLL^C*. These observations suggest that posttranslational modifications of *MLL* may be involved in regulating *MLL* activity as a transcription factor, and this aspect of its function is perturbed by leukemogenic fusions.

SPECIFICATION SUMMARY

Antigen: Maltose-binding fusion protein containing *MLL* amino acids 161-356 (Uniprot #Q03164).

Clone no.: N4.4

Host: Mouse

Antibody Class: IgG1

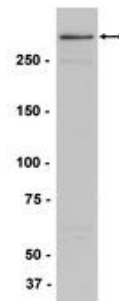
Preservatives: None - available on request.

SPECIFICITY

This antibody recognizes human and mouse *MLL^N*.

APPLICATIONS

Immunoblotting: use at 2ug/ml. A band of ~300kDa is detected.



K562 cell nuclear extract with #34041 at 2ug/ml.

Immunoprecipitation: use 2-10ug per 500ul (1-3mg/ml) of cell lysate.

These are recommended concentrations.

Endusers should determine optimal concentrations for their applications.

Positive control: K562 cell lysate.

DILUTION INSTRUCTIONS

Dilute in PBS or medium that is identical to that used in the assay system.

STORAGE AND STABILITY

This antibody is stable for at least one (1) year at -20°C. Avoid multiple freeze-thaw cycles.

PRODUCT REFERENCES

Yokoyama A et al. 2002 *Blood* 100: 3710-3718.

Yokoyama A et al. 2005 *Cell* 123: 207-218.

For in vitro investigational use only. Not intended for diagnostic or therapeutic applications.