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Product Information

Monoclonal Anti-MLL2, clone MLL2-A produced in mouse, purified immunoglobulin

Catalog Number SAB4200343

Product Description

Monoclonal Anti-MLL2 (mouse IgG1 isotype) is derived from the hybridoma MLL2-A produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a fusion protein corresponding to the C-terminus of human MLL2 (GeneID: 8085). The corresponding sequence is identical in mouse and rat MLL2 and shares 85% homology with MLL3. The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents, Catalog Number ISO2. The antibody is purified from culture supernatant of hybridoma cells grown in a bioreactor.

Monoclonal Anti- MLL2 recognizes human MLL2. The antibody may be used in several immunochemical techniques including immunoblotting (~17 kDa) and immunofluorescence.

Myeloid/lymphoid or mixed-lineage leukemia 2 (MLL2) belongs to the SET family of proteins. The SET domain of MLL2 confers strong histone 3 lysine 4 methyltransferase activity. MLL2 acts as an epigenetic transcriptional activator during growth and development. MLL2 is part of a large protein complex called ASCOM, which has been shown to be a transcriptional regulator of the β -globin and estrogen receptor genes. mutations in the MLL2 gene have been shown to be a cause of Kabuki syndrome. $^{1\text{-}3}$

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody Concentration: ~ 1.0 mg/mL

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8°C for up to one month. For extended storage, freeze at -20°C in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

<u>Immunoblotting</u>: a working antibody concentration of $0.2\text{-}0.5 \,\mu\text{g/mL}$ is recommended using human MLL2 partial fusion protein (immunogen).

Note: In order to obtain the best results using various techniques and preparations, we recommend determining optimal working dilutions by titration.

References

- 1. Ng, S.B., et al., *Nat. Genet.*, **42**, 790-793 (2010).
- Paulussen, A.D., et al., Hum. Mutat., 32, E2018-E2025 (2010).
- 3. Kim, D.H., et al., *Mol. Endocrinol.*, **23**, 1556-1562 (2009).

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