

Product Information

Monoclonal Anti-IKZF1/IKAROS, clone E1.14

produced in mouse, purified immunoglobulin

Catalog Number **SAB4200366**

Product Description

Monoclonal Anti-IKZF1/IKAROS (mouse IgG2b isotype) is derived from the hybridoma E1.14 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a peptide located at the C-terminus human IKZF1/IKAROS (GeneID: 10320). The isotype is determined using a double diffusion immunoassay 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-IKZF1/IKAROS recognizes human, monkey, rat and mouse IKZF1/IKAROS. The antibody may be used in various immunochemical techniques including, immunoblotting (~ 55 kDa), immunofluorescence, immunohistochemistry and flow cytometry.

The Ikaros gene encodes a family of hemopoietic-specific zinc finger transcriptional regulator proteins that bind to specific DNA target sequences harboring the TGGGAA consensus motif. Part of its function may depend on the interaction of Ikaros with chromatin remodeling complexes, which may be recruited by Ikaros to target sites.¹⁻³ During fetal development, Ikaros is required at the earliest stage of T cell and B cell specification. In the adult, however, lymphoid lineages rely on Ikaros at distinct phases of their development. Its activity is essential for the generation of B cell precursors but not of T cell precursors, although the differentiation of the latter is not normal.¹ Mutations or polymorphisms that lead to reduced Ikaros function or expression have also been found to be a major genetic feature in human B-cell acute lymphoblastic leukemia (B-ALL). Loss of Ikaros also promotes the development of T-cell lymphoma/leukemia in mice, which suggests that Ikaros acts as a tumor suppressor in T-cell acute lymphoblastic leukemia (T-ALL) and B-ALL.² In addition, Ikaros deletion were detected in patient with blast-phase myeloproliferative neoplasms.⁴

Reagent

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

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. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working concentration of 0.25-0.5 µg/mL is recommended using extracts of Ramos cells.

Immunocytochemistry: a working concentration of 0.25-0.5 µg/mL is recommended using Jurkat cells.

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

References

1. Georgopoulos, K., et al., *Annu. Rev. Immunol.*, **15**, 155-176 (1997).
2. Kastner, P., and Chan, S., *World J. Biol. Chem.*, **2**, 108-14 (2011).
3. Rebollo, A., and Schmitt, C., *Immunol. Cell Biol.*, **81**, 171-175 (2003).
4. Tefferi, A., *Leukemia*, **24**, 1128-1138 (2010).

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