

Product Information

Anti-Kindlin-1 Antibody, Mouse Monoclonal

Clone 4A5.14, Purified from Hybridoma Cell Culture

SAB4200480

Product Description

Anti-Kindlin-1 (mouse IgG2a isotype) is derived from the hybridoma 4A5.14 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with human Kindlin-1 (GeneID: 55612) recombinant fusion protein.¹ The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents (Cat. No. ISO2). The antibody is purified from culture supernatant of hybridoma cells grown in a bioreactor.

Anti-Kindlin-1 recognizes human Kindlin-1. The product may be used in several immunochemical techniques including immunoblotting (~ 77 kDa), immunoprecipitation, immunocytochemistry, immunohistochemistry and flow cytometry.¹

Kindlins, a family of focal adhesion proteins, are involved in attachment of the actin cytoskeleton to the plasma membrane and in integrin-mediated cellular processes.² A member of this family, Kindlin-1 (also known as Unc-112 Related Protein 1 or URP1) is highly expressed in epithelial cells, including keratinocytes. A splice variant potentially producing a truncated protein has been detected in kidney, colon and small intestine.³ Deficiency of Kindlin-1, as a result of loss-of-function mutations in the *KIND1* gene, causes Kindler syndrome, an autosomal recessive genodermatosis characterized by skin blistering, progressive skin atrophy, photosensitivity and, occasionally, carcinogenesis.⁴ This gene has also been implicated in breast cancer, lung metastasis and lung tumorigenesis.⁵ In colon cancer Kindlin-1 was identified as a potential marker.⁶

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

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

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

Immunoblotting

A working concentration of 2.0-4.0 µg/mL is recommended using SW-48 total cell extracts.

Immunocytochemistry

A working concentration of 2.5-5.0 µg is recommended using SW-48 cells.

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

References

1. Papachristou, P., et al., *Histopathology*, **51**: 499- 508 (2007).
2. Larjava, H., et al., *EMBO reports*, **9**: 1203-1208 (2008).
3. Malinin, N.L., et al., *Blood*, **115**: 4011-4017 (2010).
4. Has, C., et al., *Hum. Mutat.*, **32**: 1204-1212 (2011).
5. Sin, S., et al., *J. Nat. Cancer Inst.*, **103**: 1323-1337 (2011).
6. Fan, J., et al., *Clin. Cancer Res.*, **17**: 2908-2918 (2011).

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