

## 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.<sup>1</sup> 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.<sup>1</sup>

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.<sup>2</sup> 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.<sup>3</sup> 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.<sup>4</sup> This gene has also been implicated in breast cancer, lung metastasis and lung tumorigenesis.<sup>5</sup> In colon cancer Kindkin-1 was identified as a potential marker.<sup>6</sup>

## 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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