

## Product Information

**Anti-Ezrin antibody, Mouse monoclonal**  
Clone 3C12, purified from hybridoma cell culture

Product Number **SAB4200806**

### Product Description

Monoclonal Anti-Ezrin (mouse IgG1 isotype) is derived from the 3C12 hybridoma, produced by the fusion of mouse myeloma cells and splenocytes from a mouse immunized with the carboxy-terminal part of recombinant human ezrin (amino acids 362-585, GenelD: 7430).<sup>1-2</sup> The isotype is determined by ELISA using Mouse Monoclonal Antibody Isotyping Reagents (Product Number ISO2). The antibody is purified from culture supernatant of hybridoma cells.

Monoclonal Anti-Ezrin recognizes an epitope located on the C-terminal region of ezrin. Reactivity has been observed with human,<sup>2-3</sup> mouse,<sup>3</sup> hamster,<sup>4</sup> monkey, bovine, canine, rat, and rat-kangaroo origin. The antibody is recommended to use in various immunological techniques, including immunoblotting (~80 kDa),<sup>2-3,5</sup> immunofluorescence, immunohistochemistry,<sup>2,5</sup> and immunoprecipitation.<sup>3</sup>

Ezrin, also known as cytovillin, p81, or 80K, is a member of the ERM protein family composed of ezrin, radixin, and moesin. These proteins are known as actin-binding proteins that link the cell membrane to the actin cytoskeleton, particularly in microvillus-bearing epithelial cells.<sup>6-8</sup> Ezrin is present in microvilli, microspikes, and membrane ruffles of cells.

The ERM protein family is involved in the functional expression of membrane proteins on the cell surface, integrates Rho guanosine 5'-triphosphatase (GTPase) signaling thereby regulating cytoskeletal organization, and acts as protein kinase A (PKA)-anchoring proteins. Therefore, ERM proteins seem to play an important role in the membrane transport of electrolytes by ion channels and transporters.<sup>8</sup>

The N-terminal domain of ezrin shows sequence similarity to the cytoskeletal-associated linker proteins erythrocyte protein band 4.1 and Talin. This region directs their association between the plasma membrane and the cytoskeleton in several structures such as focal adhesions.<sup>9</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

This product is 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 continuous use, store at 2–8 °C for up to one month. For extended storage, freeze in working aliquots. Repeated freezing and thawing 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 1-2 µg/mL is recommended using canine MDCK cells extract.

Immunofluorescence: a working concentration of 0.5-1 µg/mL is recommended using human epidermoid carcinoma A431 cells.

Note: In order to obtain best results in different techniques and preparations, it is recommended to determine optimal working concentration by titration test.

## References

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