

## Product Information

**Anti-Vimentin antibody, Mouse monoclonal**  
clone VIM-13.2, purified from hybridoma cell culture

Product Number **SAB4200716**

### Product Description

Anti-Vimentin antibody, Mouse monoclonal (mouse IgM isotype) is derived from the VIM-13.2 hybridoma produced by the fusion of mouse myeloma cells and splenocytes from a BALB/c mouse immunized with human foreskin fibroblast extract. 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-Vimentin antibody recognizes human, monkey, mouse, rat, bovine, canine and chicken Vimentin. Monoclonal Anti-Vimentin is recommended to use in various immunochemical assays, including Immunoblotting (~58 kDa), Immunofluorescence and Immunohistochemistry.<sup>1-4</sup>

Vimentin is a type III intermediate filaments (IF) expressed in a wide range of cell types, including pancreatic precursor cells, sertoli cells, neuronal precursor cells, trophoblastic giant cells, fibroblasts, endothelial cells of lung blood vessels, renal tubular cells, macrophages, neutrophils, mesangial cells, leukocytes and renal stromal cells.<sup>5</sup> Vimentin plays a significant role in supporting and anchoring the cellular position of organelles such as nucleus, endoplasmic reticulum, mitochondria (either laterally or terminally), maintenance of cell shape, endurance of mechanical stress of mesenchymal cells and motility.<sup>6</sup> Increased Vimentin expression has been reported in various epithelial cancers, including prostate, gastrointestinal tumors, CNS tumors, breast, malignant melanoma, lung and others.<sup>5-7</sup>

Monoclonal Anti-Vimentin may be used for the immunocytochemical localization of vimentin in normal and pathological tissue of mesenchymal origin and thus to distinguish tumors and metastatic lesions derived from sarcomas, lymphomas and melanomas.

### 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 in working aliquots. Repeated freezing and thawing is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation. Discard working dilution samples if not used within 12 hours.

### Product Profile

**Immunoblotting:** a working concentration of 0.25–0.5 µg/mL is recommended using human foreskin fibroblast HS68 cell line extract.

**Immunofluorescence:** a working concentration of 1.25–2.5 µg/ml is recommended using human foreskin fibroblast HS68 cells.

**Note:** In order to obtain best results in different techniques and preparations we recommend determining optimal working concentration by titration test.

### References

1. Geiger S., et al., *Oral Surg Oral Med Oral Pathol.*, **60**, 517-23 (1985).
2. Mallat Y., et al., *Mol Cell Proteomics*, **13**, 18-29 (2014).
3. Nagalingam RS., et al., *J Biol Chem.*, **289**, 27199–214 (2014).
4. Laws MJ., et al., *PLoS Genet.*, **10**, e1004230 (2014).
5. Satelli A and Shulin L., *Cell Mol Life Sci.*, **68**, 3033-46 (2011).
6. Challa AA and Stefanovic B., *Mol Cell Biol.*, **31**, 3773-89 (2011).
7. Dave JM and Bayless KJ., *Microcirculation*, **21**, 333-44 (2014).

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