

## Product Information

### Anti-Raver1 (N-terminal)

produced in rabbit, affinity isolated antibody

Product Number **SAB4200091**

#### Product Description

Anti-Raver1 (N-terminal) is produced in rabbit using as the immunogen a synthetic peptide corresponding to a sequence at the N-terminal of human Raver1 (Gene ID: 125950) conjugated to KLH. The corresponding sequence is identical in mouse and rat. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-Raver1 (N-terminal) recognizes human Raver1. The antibody may be used in several immunochemical techniques including immunoblotting (~77 kDa), immunoprecipitation, and immunofluorescence. Detection of the Raver1 band by immunoblotting is specifically inhibited with the immunizing peptide.

Raver1, also known as Ribonucleoprotein PTB-binding 1, is a widely expressed multidomain protein, identified in two-hybrid screens by its ability to interact and colocalize with the cytoskeletal proteins  $\alpha$ -actinin and vinculin.<sup>1</sup> Raver1 is composed of three RNA recognition motifs (RRM) and of nuclear localization and nuclear export signals, allowing it to shuttle between the nucleus and the cytoplasm. Raver1 also colocalizes with PTB/hnRNPI, a protein involved in RNA splicing of microfilament proteins.<sup>1</sup> In skeletal muscle, a translocation of Raver1 from the nucleus to the cytoplasm is correlated with the differentiation of specific microfilament attachment sites. Based on an analysis of Vinculin:Raver1 crystal structure it was suggested that Vinculin recruits Raver1 and its mRNAs cargo to focal adhesions, promoting localization of the synthesis of adhesion complexes by the translational machinery.<sup>2</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

Store at -20 °C. For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze in working aliquots at -20 °C. 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 dilutions should be discarded if not used within 12 hours.

#### Product Profile

Immunoblotting: a working antibody concentration of 1-2  $\mu$ g/mL is recommended using lysates of K562 cells.

Immunoprecipitation: a working antibody amount of 5-10  $\mu$ g is recommended using lysates of HEK-293T cells.

Immunofluorescence: a working antibody concentration of 2-5  $\mu$ g/mL is recommended using paraformaldehyde fixed HEK-293T cells.

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

#### References

1. Huttelmaier, S. et al., *J. Cell Biol.*, **155**, 775-786 (2001)
2. Lee, J.H., et al. *Structure*, **17**, 833-842 (2009).

VS,SG,TD,KAA,PHC,MAM 05/19-1