

## Technical Bulletin

# Anti-NEZHA antibody, Mouse monoclonal

Clone NEZHA-1, purified from hybridoma cell culture

**SAB4200415**

## Product Description

Monoclonal Anti-NEZHA (mouse IgG1 isotype) is derived from the hybridoma NEZHA-1 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with a synthetic peptide corresponding to a sequence at the C-terminal region of human NEZHA (GeneID: 57662), conjugated to KLH. The corresponding sequence is identical in mouse, rat, monkey and dog NEZHA. 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.

Monoclonal Anti-NEZHA recognizes human and dog NEZHA. The antibody may be used in various immunochemical techniques including immunoblotting (~150 kDa), immunoprecipitation and immunofluorescence. Detection of the NEZHA band by immunoblotting is specifically inhibited by the immunizing peptide.

Nezha (a deity in Chinese mythology) also known as KIAA1543 and calmodulin-regulated spectrin associated protein 3, is a 1276 amino acid protein that contains one calponin homology (CH) and two coiled-coil (CC1 and 2) domains, as well as one DUF1781 (DUF) domain of unknown function.

Nezha and its binding partner PLEKHA7 were discovered as new proteins which are part of the cadherin-based protein complex in mammalian epithelial cells. This complex can anchor microtubule minus ends to the zonula adherens (ZA) and is necessary for the biogenesis of this specialized junction. Nezha exists in the cells in two pools: junctional and cytoplasmic. The junctional Nezha is recruited to this site via its interaction with PLEKHA7. Depletion of Nezha from cultured human cells disrupted the ZA.<sup>1,2</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

For continuous use, store at 2-8 °C for up to one month. 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 2.5-5.0 µg/mL is recommended using whole extracts of human SW480 cells.

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

## References

1. Meng, W., et al., *Cell*, **135**, 948-959 (2008).
2. Akhmanova, A., and Yap, A.S., *Cell*, **135**, 791-793 (2008).

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