

Product Information

Monoclonal Anti-PLEKHA7 antibody produced in mouse clone PLK7, purified from hybridoma cell culture

Catalog Number: **SAB4200643**

Product Description

Monoclonal Anti-PLEKHA7 (mouse IgG2a isotype) is derived from the hybridoma PLK7 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 N-terminal region of human PLEKHA7 (GeneID: 144100), conjugated to KLH. 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 grown in a bioreactor.

Anti- PLEKHA7 recognizes human PLEKHA7. The antibody may be used in several immunochemical techniques including immunoblotting (~130 kDa), immunocytochemistry and flow cytometry.

PH domain-containing family A, member 7 (PLEKHA7) is a 1121 amino acid protein that contains WW, PH (pleckstrin homology), and CC (coiled-coil) domains. PLEKHA7 and its binding partner NEZHA were discovered as proteins that are part of cadherin-based protein complex in mammalian epithelial cells. This complex can anchor microtubule minus ends to the zonula adherens (ZA) and is important for the biogenesis of this specialized junction. PLEKHA7 binds directly to E-cadherin, cadherin-associated protein p120-catenin and to afadin complexes, and appears to be necessary for recruiting NEZHA to the ZA.¹⁻³

Overexpression of PLEKHA7 was reported to be common in invasive lobular carcinomas (ILCs) and hence PLEKHA7 could serve as a molecular marker to differentiate ILCs from invasive ductal carcinomas (IDCs).⁴

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. Storage in “frost-free” freezers is also 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

Immunocytochemistry: a working concentration of 0.25-0.5 µg/mL is recommended using human CaCo2 cells.

Flow Cytometry: a working dilution of 2-4 µg /test is recommended using NCI-H1299 cells.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining the 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).
3. Kurita S., et al., *J. Biol. Chem.*, **288**, 29356-68 (2013)
4. Castellana B., et al., *Hum. Pathol.*, **43**, 1902-1909 (2012).

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