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Product Information

Anti-FHOD1
produced in rabbit, affinity isolated antibody

Catalog Number **SAB4200147**

Product Description
Anti-FHOD1 is produced in rabbit using as immunogen a synthetic peptide corresponding to amino acids 1059-1072 of human FHOD1 (GeneID: 29109), conjugated to KLH. The corresponding sequence differs by 2 amino acids in mouse and rat FHOD1. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-FHOD1 recognizes human FHOD1. The antibody may be used in several immunochemical techniques including immunoblotting (~130 kDa) and immunohistochemistry. Detection of the FHOD1 band by immunoblotting is specifically inhibited by the immunizing peptide.

FHOD1 (formin homology 2 domain containing 1) is a member of the formin/diaphanous family of proteins. FHOD1 binds directly to F-actin and induces actin-fiber formation. FHOD1 coordinates actin filament and microtubule alignment to mediate cell elongation. Filament coordination and cell elongation depend on the activity of the Rho-ROCK cascade. FHOD1 is ubiquitously expressed, but is found in abundance in the spleen. This protein has sequence homology to diaphanous and formin proteins within the Formin Homology (FH)1 and FH2 domains. It also contains a coiled-coil domain, a collagen-like domain, two nuclear localization signals, and several potential PKC and PKA phosphorylation sites. FHOD1 is a predominantly cytoplasmic protein and is expressed in a variety of human cell lines.[1-3]

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 Material 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. 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 0.5-1.0 µg/mL is recommended using whole extracts of human K562 cells.

Immunohistochemistry: a working antibody concentration of 10-20 µg/mL is recommended using heat-retrieved formalin-fixed, paraffin-embedded human spleen sections and Biotin / ExtrAvidin®-Peroxidase staining system.

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

References
1. Takeya, R., and Sumimoto, H., *J. Cell Sci.*, **116**, 4567-4575 (2003).
2. Gasteier, J.E., et al., *Exp. Cell Res.*, **306**, 192-202 (2005).
3. Schulte, A., et al., *Structure*, **16**, 1313-1323 (2008).

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