Product Information

Anti-ADFP / PLIN2 Antibody, Mouse Monoclonal

Clone ADFP-5, Purified from Hybridoma Cell Culture

SAB4200452

Product Description

Anti-ADFP/PLIN2 (mouse IgG1 isotype) is derived from the hybridoma ADFP-5 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-terminus of human PLIN2 (GeneID: 123), conjugated to KLH. 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.

Anti-ADFP/PLIN2 recognizes human ADFP/PLIN2. The antibody can be used in several immunochemical techniques including immunoblotting (~ 48 kDa) and immunofluorescence. Detection of the ADFP/PLIN2 band by immunoblotting is specifically inhibited by the immunizing peptide.

ADFP belongs to the perilipin family, members of which coat intracellular lipid storage droplets. This protein is associated with the lipid globule surface membrane material and may be involved in development and maintenance of adipose tissue. However, it is not restricted to adipocytes as previously thought, but is found in a wide range of cultured cell lines, including fibroblasts, endothelial and epithelial cells, and tissues, such as lactating mammary gland, adrenal cortex, Sertoli and Leydig cells, and hepatocytes in alcoholic liver cirrhosis, suggesting that it may serve as a marker of lipid accumulation in diverse cell types and diseases. Alternatively, spliced transcript variants have been found for this gene.[1-4]

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

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 2-4 µg/mL is recommended using whole extracts of HEK-293T cells overexpressing human ADFP.

Immunofluorescence

A working concentration of 5-10 µg/mL is recommended using human HepG2 or SH-SY5Y cells.

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

References

1. Chang, B.H.J., and Chan, L., *Am. J. Physiol. Gastrointest. Liver Physiol.*, **292**: G1465-G1468 (2007).
2. Brasaemle, D.L., et al., *J. Lipid Res.*, **38**: 2249-2263 (1997).
3. Heid, H.W., et al., *Cell Tissue Res.*, **294**: 309-321 (1998).
4. Robenek, H., et al., *J. Lipid Res.*, **46**: 1331-1338 (2005).

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