3050 Spruce Street, St. Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

Product Information

Anti-Palladin

produced in rabbit, affinity isolated antibody

Product Number A3986

Product Description

Anti-Palladin is produced in rabbit using as the immunogen a synthetic peptide corresponding to a fragment of human palladin (GeneID: 23022), conjugated to KLH. The corresponding sequence differs by 2 amino acids in mouse and rat. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-Palladin recognizes human palladin. The antibody may be used in various immunochemical techniques including immunoblotting (~140/90 kDa), immunoprecipitation and immunofluorescence. Detection of the palladin band by immunoblotting is specifically inhibited by the immunizing peptide.

Palladin is a component of actin-containing microfilaments that control cell shape, adhesion, and contraction. It is a phosphoprotein that is widely expressed in vertebrate cells and tissues. Palladin is expressed as three major isoforms of 90, 140, and 200 kDa. The most common isoform in mouse is the 90 kDa isoform. The 140 kDa isoform is also widely expressed, particularly in epithelial-derived cell lines, while the 200 kDa isoform is specifically detected in the heart. Palladin consists of a proline-rich region in the NH₂-terminal half of the protein and three tandem Ig C2 domains in the COOH-terminal half. The Ig3 domain of palladin binds to F-actin. Its expression is required for normal mammalian embryogenesis since its inactivation leads to embryonic lethality. Palladin interacts with the actin-associated proteins α -actinin, VASP, ezrin, and profilin, suggesting that it is required for normal actin cytoskeleton organization.1-

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, the product maybe stored at 2–8 °C for up to one month. For extended storage, freeze in working aliquots at –20 °C. Repeated freezing and thawing 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 antibody concentration of 0.5-1.0 μ g/mL is recommended using whole extracts of human HeLa cells.

Immunoprecipitation: a working antibody amount of 5-10 μg is recommended using lysates of HeLa cells.

Immunofluorescence: a working antibody concentration of 2-5 μ g/mL is recommended using human HeLa cells.

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

References

- Parast, M.M., and Otey, C.A., J. Cell Biol., 150, 643-655 (2000).
- Mykkanen, O.M. et al., Mol. Biol. Cell, 12, 3060-3073 (2001).
- 3. Rachlin, A.S., and Otey, C.A., *J. Cell Sci.*, **119**, 995-1004 (2006).
- Dixon, R.D.S. et al., J. Biol. Chem., 283, 6222-6231 (2008).

VS.ST.TD.KAA.PHC.MAM 04/19-1