

## Product Information

### Anti-Palladin (C-terminal)

produced in rabbit, IgG fraction of antiserum

Product Number **A3861**

### Product Description

Anti-Palladin (C-terminal) is produced in rabbit using as the immunogen a synthetic peptide corresponding to a sequence at the C-terminal of human palladin (GeneID: 23022), conjugated to KLH. The corresponding sequence is identical in rat and differs by 1 amino acid in mouse. Whole serum is purified using protein A immobilized on agarose to provide the IgG fraction of antiserum.

Anti-Palladin (C-terminal) 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. A non-specific band of ~55 kDa may be detected in some cell extract preparations.

Palladin is a component of actin-containing microfilaments that control cell shape, adhesion, and contraction. Palladin 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 palladin isoform in mouse is the 90 kDa. 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 N-terminal half of the protein and three tandem Ig C2 domains in the C-terminal half. The Ig3 domain of palladin binds to F-actin. Palladin expression is required for normal mammalian embryogenesis since inactivation of paladin leads to embryonic lethality. Palladin interacts with the actin-associated proteins  $\alpha$ -actinin, VASP, ezrin, and profilin, suggesting that it is required for normal actin cytoskeleton organization.<sup>1-4</sup>

### Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

### 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, 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 antibody dilution of 1:250-1:500 is recommended using whole extracts of human HeLa cells.

**Immunoprecipitation:** a working antibody amount of 10-20  $\mu$ L is recommended using HeLa cell lysates.

**Immunofluorescence:** a working antibody dilution of 1:250-1:500 is recommended using human HeLa cells.

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

### References

1. Parast, M.M., and Otey, C.A., *J. Cell Biol.*, **150**, 643-655 (2000).
2. 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).
4. Dixon, R.D.S. et al., *J. Biol. Chem.*, **283**, 6222-6231 (2008).

VS,ST,KAA,PHC,MAM 04/19-1