

#8518 Store at -20C

## Palladin (D9H2) Rabbit mAb



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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IHC-P	H M R	Endogenous	140, 90	Rabbit IgG	#Q8WX93	23022

### Product Usage Information

#### Application

Western Blotting  
Immunohistochemistry (Paraffin)

#### Dilution

1:1000  
1:400

### Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

### Specificity / Sensitivity

Palladin (D9H2) Rabbit mAb recognizes endogenous levels of total palladin protein.

### Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro1043 of human palladin protein.

### Background

The actin-associated scaffold protein, palladin, is associated with multiple actin-rich structures, and plays a role in cellular migration and invasion (1). Palladin regulates the formation of invasive structures called podosomes and invadopodia (1-3). Alternative splicing results in at least three palladin isoforms, including the widely expressed 140 kDa and 90 kDa isoforms (2). Palladin has been shown to promote invasion in basal-like breast carcinoma models (4). Palladin is also upregulated in injured kidneys, and promotes migration of kidney cells to facilitate repair (5). In differentiating muscle cells, palladin regulates migration and myogenesis (6). Several research studies have focused on palladin expression and function in cancer-associated fibroblasts (CAFs). Researchers have shown that expression of palladin in stromal fibroblasts of pancreatic ductal adenocarcinoma is an indication of the effectiveness of chemotherapy (7). The cancer associated transcription factor Twist1 may require palladin and collagen alpha1 for its metastatic effect in fibroblasts (8).

### Background References

- Goicoechea, S.M. et al. (2008) *Eur J Cell Biol* 87, 517-25.
- Najm, P. and El-Sibai, M. (2014) *Cell Adh Migr* 8, 29-35.
- Goicoechea, S.M. et al. (2014) *Oncogene* 33, 1265-73.
- von Nandelstadh, P. et al. (2014) *Mol Biol Cell* 25, 2556-70.
- Chang, E.H. et al. (2015) *Sci Rep* 5, 7695.
- Nguyen, N.U. and Wang, H.V. (2015) *PLoS One* 10, e0124762.
- Sato, D. et al. (2016) *PLoS One* 11, e0152523.
- García-Palmero, I. et al. (2016) *Oncogene* , .

### Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

### Western Blot Buffer

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

### Applications Key

**WB:** Western Blotting **IHC-P:** Immunohistochemistry (Paraffin)

### Cross-Reactivity Key

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster  
**X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse  
**GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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