

#12254 Store at -20°C

## Plectin-1 (D6A11) Rabbit mAb



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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP, IF-IC	H M R Mk	Endogenous	400-500	Rabbit IgG	#Q15149	5339

### Product Usage Information

#### Application

Western Blotting  
Immunoprecipitation  
Immunofluorescence (Immunocytochemistry)

#### Dilution

1:1000  
1:50  
1:50

### 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

Plectin-1 (D6A11) Rabbit mAb recognizes endogenous levels of total plectin-1 protein.

### Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Leu2980 of human plectin-1 protein.

### Background

Plectin is a large, widely expressed protein that crosslinks the intermediate filament and actin cytoskeleton, mechanically stabilizing cells and tissues. Plectin also plays a role in the regulation of actin dynamics and acts as a scaffold for signaling molecules (1). Plectin is important in the stabilization of hemidesmosomes, crosslinking them to the intermediate filament network. Research studies have shown that mutations in plectin and other genes coding for hemidesmosomal proteins can cause epidermolysis bullosa, a condition manifested by fragile skin and frequent blistering (1,2). Plectin modulates signals to PKC through binding and sequestration of RACK1, the receptor for activated C kinase 1 (3,4). Plectin is also involved in the regulation of cytokeratin architecture and cell stress response (4), signaling through the chemokine receptor CXCR4 (5) and regulation of AMP-activated protein kinase (AMPK) activity and signaling in mouse myotubes (6).

### Background References

1. Wiche, G. (1998) *J Cell Sci* 111 ( Pt 17), 2477-86.
2. Pfendner, E. et al. (2005) *Exp Dermatol* 14, 241-9.
3. Osmanagic-Myers, S. and Wiche, G. (2004) *J Biol Chem* 279, 18701-10.
4. Osmanagic-Myers, S. et al. (2006) *J Cell Biol* 174, 557-68.
5. Ding, Y. et al. (2008) *Exp Cell Res* 314, 590-602.
6. Gregor, M. et al. (2006) *J Cell Sci* 119, 1864-75.

### 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 nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

### Applications Key

**WB:** Western Blotting **IP:** Immunoprecipitation **IF-IC:** Immunofluorescence (Immunocytochemistry)

### 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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