

# Plectin-1 (D6A11) Rabbit mAb



✓ 100 µl  
 (10 western blots)

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**Entrez-Gene ID** #5339  
**Swiss-Prot Acc.** #Q15149

Applications W, IP, IF-IC Endogenous	Species Cross-Reactivity* H, M, R, Mk	Molecular Wt. 400-500 kDa	Isotype Rabbit IgG**
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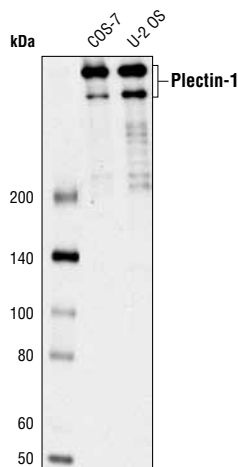
**Background:** Plectin is a large, widely expressed protein that crosslinks the intermediate filament and actin cytoskeleton, mechanically stabilizing cells and tissues. Plectin also plays a role in the regulation of actin dynamics and acts as a scaffold for signaling molecules (1). Plectin is important 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).

**Specificity/Sensitivity:** Plectin-1 (D6A11) Rabbit mAb recognizes endogenous levels of total plectin-1 protein.

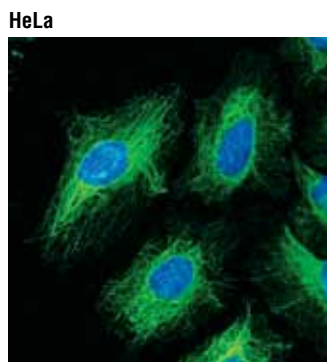
**Source/Purification:** Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Leu2980 of human plectin-1 protein.

## Background 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.



Western blot analysis of extracts from COS-7 and U-2 OS cells using Plectin-1 (D6A11) Rabbit mAb.



Confocal immunofluorescent analysis of HeLa cells using Plectin-1 (D6A11) Rabbit mAb (green). Blue pseudocolor = DRAQ5® #4084 (fluorescent DNA dye).

**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.

**\*Species cross-reactivity is determined by western blot.**

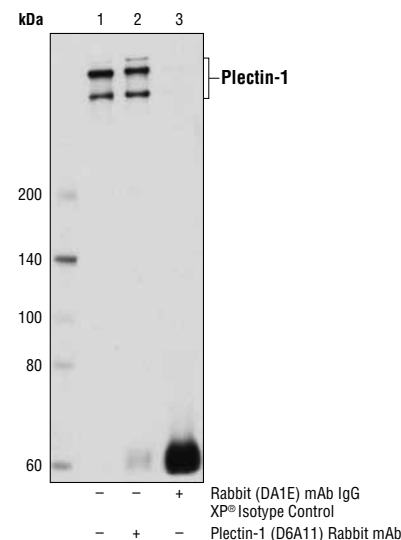
**\*\*Anti-rabbit secondary antibodies must be used to detect this antibody.**

## Recommended Antibody Dilutions:

Western blotting	1:1000
Immunoprecipitation	1:50
Immunofluorescence (IF-IC)	1:50

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Immunoprecipitation of plectin-1 from U-2 OS cell extracts, using Plectin-1 (D6A11) Rabbit mAb (lane 2) or Rabbit (DA1E) mAb IgG XP® Isotype Control #3900 (lane 3). Lane 1 is 10% input. Western blot analysis was performed using Plectin-1 (D6A11) Rabbit mAb.

**IMPORTANT:** For western blots, incubate membrane with diluted antibody in 5% nonfat dry milk, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

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**Applications Key:** W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide  
**Species Cross-Reactivity Key:** H—human M—mouse R—rat Hm—hamster Mk—monkey 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 All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.