

BP5019**Polyclonal Antibody to Plectin (C-term) - Serum****Alternate names:**

Hemidesmosomal protein 1, PCN, PLEC, PLEC1, PLTN, Plectin-1

Quantity:

0.1 ml

Background:

Plectin, a 500-kDa intermediate filament binding protein, is localized to the cytoplasm and acts to both stabilize and give strength to cells via cross-linking. Plectin cross-links intermediate filaments to microtubules and microfilaments, and anchors intermediate filaments to the plasma and nuclear membranes. Plectin binds many proteins, including actin, vimentin, and Lamin B. Phosphorylation by PKA or PKC results in decreased binding to Lamin B, and phosphorylation by PKA enhances the plectin-vimentin interactions.

Uniprot ID:[Q15149](#)**NCBI:**[NP_000436.2](#)**GeneID:**[5339](#)**Host:**

Guinea Pig

Immunogen:

C-terminal domain of Human recombinant Plectin (aa. 4367-4684).

Format:**State:** Liquid whole antiserum**Preservatives:** 0.09% Sodium Azide**Stabilizers:** 0.5% BSA**Applications:****Western blot** (1/16,000 using ECL).**Immunofluorescence.****Immunohistochemistry on Frozen Sections.****Immunohistochemistry on Paraffin Sections** (1/500).***Incubation Time:*** 1 h at RT, extended with paraffin sections; Microwave treatment enhances staining on paraffin sections.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity:

Calculated MW 532,000 protein plectin, localizing to plasma membrane attachment sites of intermediate filaments and microfilaments (actin) such as desmosomes and hemidesmosomes, Z-line structures and dense plaques of striated and smooth muscle.

Strong positive reaction is also found with endothelia, fibroblasts and infiltrating cells (e.g. lymphocytes).

Species: Human (but non-reactive with glia cells).Reduced cross-reactivity with Fish and *Xenopus laevis*.**Negative** with Bovine and Mouse.

Other species not tested.

Storage:

Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

General Readings:

1. Liu Ch-G, Maercker Ch, Castanon MJ, Hauptmann R, Wiche G: Human plectin: Organization of the gene, sequence analysis, and chromosome localization (8q24). Proc. Natl. Acad. Sci. U.S.A. 93 4278-4283 (1996).
2. Schröder R, Warlo I, Herrmann H, van der Ven PF, Klasen C, Blümcke I, et al. Immunogold EM reveals a close association of plectin and the desmin cytoskeleton in human skeletal muscle. Eur J Cell Biol. 1999 Apr;78(4):288-95. PubMed PMID: 10350217.