

Technical Data Sheet

Purified Mouse Anti-Plectin

Product Information

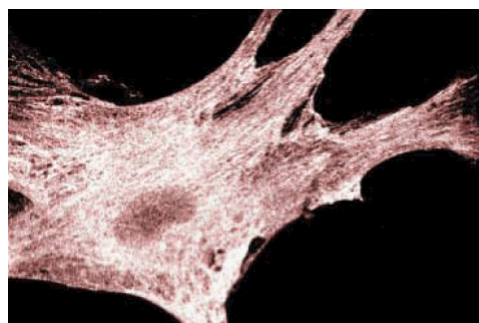
Material Number:	611348
Size:	50 µg
Concentration:	250 µg/ml
Clone:	31/Plectin
Immunogen:	Human Plectin aa. 3062-3184
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Human
Target MW:	400/500 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

Plectin is an intermediate filament-binding protein that acts as a cross-linking element in the cytoskeleton. Sequence analysis reveals that plectin is dumbbell shaped and contains a long central α -helical coiled-coil rod flanked by globular domains. Plectin has six C-terminal repeats that exhibit a tandemly repeated amino acid sequence motif that is characteristic of intermediate filament-associated proteins, such as BPAG1 and desmoplakin. Plectin associates with the sarcolemma, nuclear membrane, and intermyofibrillar network in muscle and with hemidesmosomes in skin. These localizations may be a result of plectin binding to a variety of cytoskeletal proteins including laminin B, microtubule-associated proteins, and α -spectrin. In addition, plectin interacts with G-actin in a PIP2-dependent manner and with actin stress fibers via its N-terminal actin-binding domain. Patients with epidermolysis bullosa simplex, a disease that results in structural and functional abnormalities in muscle and skin, have no plectin expression in muscle tissues and deficient plectin levels in skin. Thus, plectin cytoskeletal association may be critical for the structural integrity of muscle and skin.



Western blot analysis of Plectin on HeLa cells. Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of Plectin.



Immunofluorescence staining of HISM

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Store undiluted at -20°C.

Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development

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Suggested Companion Products

Catalog Number	Name	Size	Clone
611449	HeLa Cell Lysate	500 µg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

Andra K, Nikolic B, Stocher M, Drenckhahn D, Wiche G. Not just scaffolding: plectin regulates actin dynamics in cultured cells. *Genes Dev.* 1998; 12(21):3442-3451.(Biology)

Banwell BL, Russel J, Fukudome T, Shen XM, Stilling G, Engel AG. Myopathy, myasthenic syndrome, and epidermolysis bullosa simplex due to plectin deficiency. *J Neuropathol Exp Neurol.* 1999; 58(8):832-846.(Biology)

Liu CG, Maercker C, 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.* 1996; 93(9):4278-4283.(Biology)

Wiche G, Krepler R, Artlieb U, Pytela R, Denk H. Occurrence and immunolocalization of plectin in tissues. *J Cell Biol.* 1983; 97(3):887-901.(Biology)