Technical Data Sheet

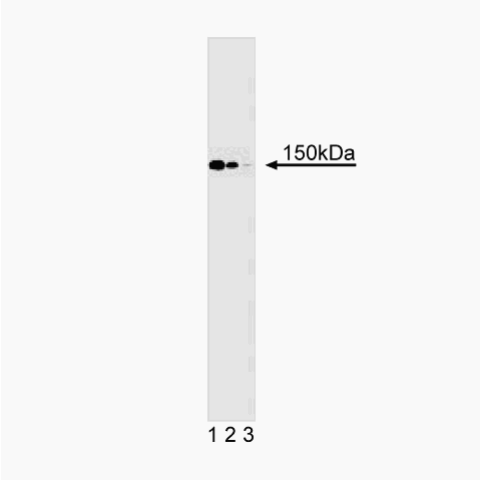
Purified Mouse Anti-Symplekin

Product Information

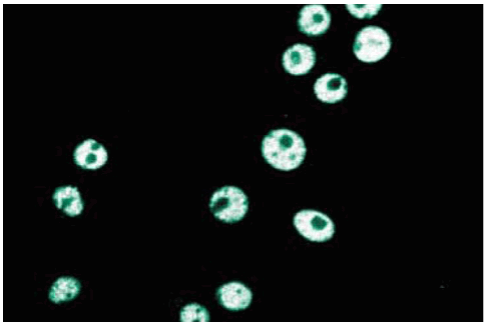
Material Number:	**610644**
Size:	50 µg
Concentration:	250 µg/ml
Clone:	25/Symplekin
Immunogen:	Human Symplekin aa. 914-1080
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Rat Tested in Development: Mouse, Human, Dog, Chicken
Target MW:	150 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

Tight junctions or *zonula occludens*, are specialized epithelial cell-cell contact sites that modulate the diffusion of macromolecules and ions through the intracellular space. Tight juctions are formed by the weaving of protein strands between two adjacent plasma membranes. Symplekin is a protein component of the submembraneous face of the tight junctions in polar epithelial cells, but is absent in vascular endothelium. Symplekin mRNA encodes a protein of 1142 amino acids with an apparent molecular weight of 150 kDa. Studies have shown that both symplekin mRNA and protein are present in the cytoplasm and nucleus in a variety of cells. However, Symplekin is recruited to the *zonula occludens* only in those cells which form functional cell-cell contacts.



Western blot analysis of Symplekin on a PC12 cell lysate (Rat neuroblastoma; ATCC CRL-1721). *Lane 1: 1:1000, lane 2: 1:2000, lane 3: 1:4000 dilution of the mouse anti-Symplekin antibody.*



Immunofluorescence staining of PC12 cells (Rat neuroblastoma; ATCC CRL-1721).

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.
Store undiluted at -20°C.

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.259.0187	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country-specific contact information, visit **bdbiosciences.com/how_to_order/**

Application Notes

Application

Western blot	Routinely Tested
Immunofluorescence	Tested During Development
Immunoprecipitation	Tested During Development
Immunohistochemistry	Not Recommended

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western_Blotting.shtml

Suggested Companion Products

Catalog Number	Name	Size	Clone
611454	PC12 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

Cordenonsi M, D'Atri F, Hammar E, et al. Cingulin contains globular and coiled-coil domains and interacts with ZO-1, ZO-2, ZO-3, and myosin. *J Cell Biol.* 1999; 147(7):1569-1581.(Biology: Western blot)

Keon BH, Schafer S, Kuhn C, Grund C, Franke WW. Symplekin, a novel type of tight junction plaque protein. *J Cell Biol.* 1996; 134(4):1003-1018.(Biology)