# **Technical Data Sheet**

# Purified Mouse anti-p120 Catenin (pT916)

## **Product Information**

Material Number:	558398		
Size:	0.1 mg		
Concentration:	0.5 mg/ml		
Clone:	1/Catenin		
Immunogen:	Phosphorylated Human p120 Catenin peptide		
Isotype:	Mouse (BALB/c) IgG2b, κ		
Reactivity:	QC Testing: Human		
Target MW:	120 kDa		
Storage Buffer:	Aqueous buffered solution containing $\leq 0.09\%$ sodium azide.		

#### Description

The membrane associated protein pp120 Src substrate (p120 catenin, p120cas) was identified as a tyrosine kinase substrate that is phosphorylated in Src-transformed cells. It shares structural similarity with the Drosophila Armadillo protein and the vertebrate β-catenin and  $\gamma$ -catenin proteins in its 42-amino acid Arm domain. p120 catenin is localized to the E-Cadherin/catenin cell adhesion complex. Like  $\beta$ and y-catenin, p120 catenin directly associates with the cytoplasmic C-terminus of E-Cadherin via its Arm domain. It exists as four isoforms that range in size from 90 to 115 kDa. Expression of these isoforms is heterogeneous in human carcinomas, suggesting that altered expression contributes to malignancy. Phosphorylation of multiple serine (S252, S268, S288, and S879), and threonine (T310 and T916) residues in p120 catenin may regulate its activity. The S879 residue is phosphorylated after PKC activation, while the S268 site is dephosphorylated after PKC activation. The latter residue is phosphorylated in vitro by p160 Rock. S252 and T310 residues are phosphorylated in vitro by GSK3b. Thus, p120 catenin function may be regulated in a complex manner through both serine and threonine phosphorylation.

The 1/Catenin monoclonal antibody recognizes the phosphorylated T916 in the carboxy-terminal tail of human p120 catenin. The orthologous phosphorylation site in mouse p120 catenin is T889.



Western blot analysis of p120 catenin (pT916) in human epidermis. Lysates from control (left panel) and calvculin A-plus-okadaic acid-treated (right panel) human A-431 epidermoid carcinoma were probed with purified mouse anti-p120 catenin (pT916) monoclonal antibody at concentrations of 0.0039 µg/ml (lanes 1,4), 0.0019 µg/ml (lanes 2,5), and 0.001 µg/ml (lanes 3,6). p120 catenin (pT916) is identified as a band of 120 kDa in the treated cells

#### **Preparation and Storage**

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at 4°C.

## **Application Notes**

Application									
Western blot					Routinely Tested	Routinely Tested			
Suggeste	d Compani	on Product	S						
Catalog Number		Name				Size	Clone		
554002 HRP Goat Anti-Mouse Ig				1.0 ml	(none)				
<b>BD</b> Bioscie	ences								
bdbiosciences.	.com								
United States 877.232.8995	<b>Canada</b> 888.259.0187	Europe 32.53.720.550	Japan 0120.8555.90	Asia Pacific 65.6861.0633	Latin America/Caribbean 55.11.5185.9995				
For country-sp	ecific contact in	formation, visit I	bdbiosciences.co	om/how_to_orde	r/				
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# **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.

# References

Reynolds AB, Roczniak-Ferguson A. Emerging roles for p120-catenin in cell adhesion and cancer. Oncogene. 2004; 23:7947-7956.(Biology)