

## p120 (6H11): sc-23873



The Power to Question

**BACKGROUND**

The catenins,  $\alpha$ ,  $\beta$  and  $\gamma$ , are proteins which bind to the highly conserved, intracellular cytoplasmic tail of E-cadherin. Together, the catenin/cadherin complexes play an important role mediating cellular adhesion.  $\alpha$ -catenin was initially described as an E-cadherin-associated protein and has been shown to associate with other members of the cadherin family, N-cadherin and P-cadherin.  $\beta$ -catenin associates with the cytoplasmic portion of E-cadherin which is necessary for the function of E-cadherin as an adhesion molecule.  $\beta$ -catenin has also been found in complexes with the tumor suppressor protein APC.  $\gamma$ -catenin, also known as plakoglobin, is a protein that binds with  $\alpha$ -catenin and N-cadherin. A related protein, p120, exhibits sequence homology with the catenins at four discrete domains. p120 not only serves as a substrate for Src, but is also found in E-cadherin complexes containing catenins.

**CHROMOSOMAL LOCATION**

Genetic locus: CTNND1 (human) mapping to 11q12.1; Ctnnd1 (mouse) mapping to 2 D.

**SOURCE**

p120 (6H11) is a mouse monoclonal antibody raised against amino acids 8-349 of mouse p120.

**PRODUCT**

Each vial contains 200  $\mu$ g IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

p120 (6H11) is available conjugated to agarose (sc-23873 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-23873 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-23873 PE), fluorescein (sc-23873 FITC), Alexa Fluor® 488 (sc-23873 AF488), Alexa Fluor® 546 (sc-23873 AF546), Alexa Fluor® 594 (sc-23873 AF594) or Alexa Fluor® 647 (sc-23873 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-23873 AF680) or Alexa Fluor® 790 (sc-23873 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

p120 (6H11) is recommended for detection of p120 of mouse, rat, human, canine and avian origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:100) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

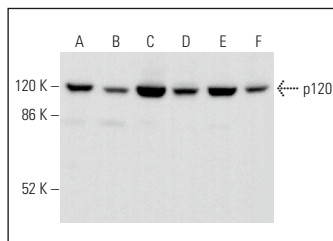
Suitable for use as control antibody for p120 siRNA (h): sc-36139, p120 siRNA (m): sc-36140, p120 siRNA (r): sc-106992, p120 shRNA Plasmid (h): sc-36139-SH, p120 shRNA Plasmid (m): sc-36140-SH, p120 shRNA Plasmid (r): sc-106992-SH, p120 shRNA (h) Lentiviral Particles: sc-36139-V, p120 shRNA (m) Lentiviral Particles: sc-36140-V and p120 shRNA (r) Lentiviral Particles: sc-106992-V.

Molecular Weight of p120: 100-120 kDa.

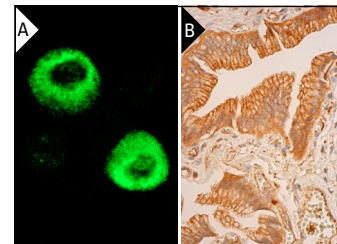
Positive Controls: F9 cell lysate: sc-2245 or HeLa whole cell lysate: sc-2200.

**STORAGE**

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**DATA**

p120 (6H11): sc-23873. Western blot analysis of p120 expression in PC-12 (A), EOC 20 (B), F9 (C), KNrk (D), HeLa (E) and A-431 (F) whole cell lysates. Detection reagent used: m-IgGκ BP-HRP: sc-516102.



p120 (6H11): sc-23873. Immunofluorescence staining of methanol-fixed NIH/3T3 cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing cytoplasmic and membrane staining of glandular cells (B).

**SELECT PRODUCT CITATIONS**

- Wang, J.J., et al. 2006. The antitumor effect of a novel differentiation inducer, 2, 2-Bis (4-(4-amino-3-hydroxyphenoxy) phenyl) adamantane (DPA), in combinatory therapy on human colon cancer. *Int. J. Oncol.* 28: 1003-1012.
- Zanucco, E., et al. 2011. Expression of B-RAF V600E in type II pneumocytes causes abnormalities in alveolar formation, airspace enlargement and tumor formation in mice. *PLoS ONE* 6: e29093.
- Hong, J.Y., et al. 2012. Down's-syndrome-related kinase Dyrk1A modulates the p120-catenin-Kaiso trajectory of the Wnt signaling pathway. *J. Cell Sci.* 125: 561-569.
- Fan, C., et al. 2015. Zbed3 contributes to malignant phenotype of lung cancer via regulating  $\beta$ -catenin and p120-catenin 1. *Mol. Carcinog.* 54: E138-E147.
- Sroka, R., et al. 2016. Cortactin is a scaffolding platform for the E-cadherin adhesion complex and is regulated by protein kinase D1 phosphorylation. *J. Cell Sci.* 129: 2416-2429.
- Mruk, D.D., et al. 2017. Lonidamine-ethyl ester-mediated remodelling of the Sertoli cell cytoskeleton induces phosphorylation of plakoglobin and promotes its interaction with  $\alpha$ -catenin at the blood-testis barrier. *Reprod. Fertil. Dev.* 29: 998-1011.
- Shen, M., et al. 2018. Cell-specific functions of ADAM17 regulate the progression of thoracic aortic aneurysm. *Circ. Res.* 123: 372-388.
- Venhuizen, J.H., et al. 2019. Differential expression of p120-catenin 1 and 3 isoforms in epithelial tissues. *Sci. Rep.* 9: 90.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.

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