SANTA CRUZ BIOTECHNOLOGY, INC.

p-p120 (pS268.9A): sc-293000

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The catenins, α, β and γ, are proteins which bind to the highly conserved, intra-cellular cytoplasmic tail of E-cadherin. Together, the catenin/cadherin complexes play an important role mediating cellular adhesion. A related protein, p120 [catenin (cadherin associated protein), δ 1], also known as cadherin-associated Src substrate, Ctnnd1, Catns or Ctnnd, is a 968 amino acid tyrosine kinase substrate belonging to the β-catenin family. Expressed in vascular endothelium, p120 localizes to the cytoplasm, nucleus and cell membrane. p120 plays a role in ligand-induced receptor signaling through EGF, PDGF, CSF-1 and Neu receptors, and exhibits sequence homology with the catenins at four discreet domains. p120 serves as a substrate for Src and is found in E-cadherin complexes containing catenins. p120 has four major isoforms, each of which has additional isoforms due to alternative splicing events. p120 contains ten ARM repeats and is phosphorylated following translation.

REFERENCES

1. Reynolds, A.B., et al. 1992. p120, a novel substrate of protein tyrosine kinase receptors and of p60v-Src, is related to cadherin-binding factors β-catenin, plakoglobin and armadillo. Oncogene 7: 2439-2445.
2. Reynolds, A.B., et al. 1996. The gene encoding $p120^{cas}$, a novel catenin, localizes on human chromosome 11q11 (CTNND) and mouse chromosome 2 (Catns). Genomics 31: 127-129.
3. Dillon, D.A., et al. 1998. The expression of $p120^{ctn}$ protein in breast cancer is independent of α- and β-catenin and E-cadherin. Am. J. Pathol. 152: 75-82.
4. Keirsebilck, A., et al. 1998. Molecular cloning of the human $p120^{ctn}$ catenin gene (CTNND1): expression of multiple alternatively spliced isoforms. Genomics 50: 129-146.
5. Bonne, S., et al. 1998. Chromosomal mapping of human armadillo genes belonging to the $p120^{ctn}$/plakophilin subfamily. Genomics 51: 452-454.
6. Perez-Moreno, M., et al. 2006. p120-catenin mediates inflammatory responses in the skin. Cell 124: 631-644.

CHROMOSOMAL LOCATION

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

SOURCE

p-p120 (pS268.9A) is a mouse monoclonal antibody raised against a short amino acid sequence containing Ser 268 phosphorylated p120 of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

RESEARCH USE

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

APPLICATIONS

p-p120 (pS268.9A) is recommended for detection of Ser 268 phosphorylated p120 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (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.

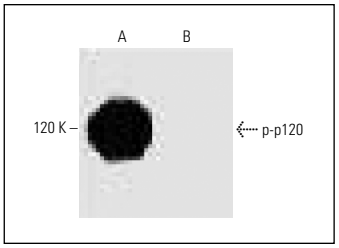
Molecular Weight of p-p120: 100-120 kDa.

Positive Controls: A-431 + Calyculin A cell lysate: sc-2260, ECV304 + pervanadate cell lysate: sc-24672 or A-431 + pervanadate cell lysate: sc-24654.

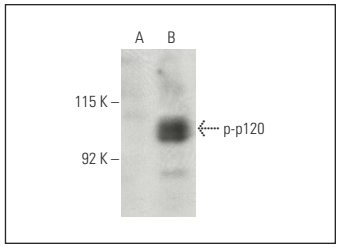
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto B Blocking Reagent: sc-2335 (use 50 mM NaF, sc-24988, as diluent), Lambda Phosphatase: sc-200312A and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



p-p120 (pS268.9A): sc-293000. Western blot analysis of p120 phosphorylation in Calyculin A treated A-431 whole cell lysates either untreated (**A**) or treated (**B**) with lambda phosphatase (sc-200312A).



p-p120 (pS268.9A): sc-293000. Western blot analysis of p120 phosphorylation in untreated A-431 (**A**) and pervanadate-treated A-431 (**B**) whole cell lysates. Detection reagent used: m-IgGκ BP-HRP: sc-516102.

SELECT PRODUCT CITATIONS

1. Vinyoles, M., et al. 2017. Activation of CK1ε by PP2A/PR61ε is required for the initiation of Wnt signaling. Oncogene 36: 429-438.

STORAGE

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