

p130 (A-10): sc-374521

BACKGROUND

The human retinoblastoma gene product Rb plays an important role in the negative regulation of cell proliferation. The Rb family includes p107 and p130, which form complexes with E2F proteins, and share a high degree of structural homology in the adenovirus E1A binding domain (i.e., "pocket region"), which plays a primary role in the function of these proteins. The Rb family members undergo cell cycle dependent phosphorylation during mid-G₁ to S phase transition, which is dependent upon the activity of cyclin D/Cdk4. In contrast to pRb and p107, p130 is also phosphorylated during G₀ and the early G₁ phase of the cell cycle. p130 is specifically phosphorylated on serine and threonine residues in cells arrested in G₀ by serum deprivation or density arrest, and these residues are clustered within a short co-linear region unique to p130 defined as the loop.

CHROMOSOMAL LOCATION

Genetic locus: RBL2 (human) mapping to 16q12.2; Rbl2 (mouse) mapping to 8 C5.

SOURCE

p130 (A-10) is a mouse monoclonal antibody raised against amino acids 406-530 mapping within an internal region of p130 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.

p130 (A-10) is available conjugated to agarose (sc-374521 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374521 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374521 PE), fluorescein (sc-374521 FITC), Alexa Fluor® 488 (sc-374521 AF488), Alexa Fluor® 546 (sc-374521 AF546), Alexa Fluor® 594 (sc-374521 AF594) or Alexa Fluor® 647 (sc-374521 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-374521 AF680) or Alexa Fluor® 790 (sc-374521 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

p130 (A-10) is recommended for detection of p130 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for p130 siRNA (h): sc-29425, p130 siRNA (m): sc-29426, p130 shRNA Plasmid (h): sc-29425-SH, p130 shRNA Plasmid (m): sc-29426-SH, p130 shRNA (h) Lentiviral Particles: sc-29425-V and p130 shRNA (m) Lentiviral Particles: sc-29426-V.

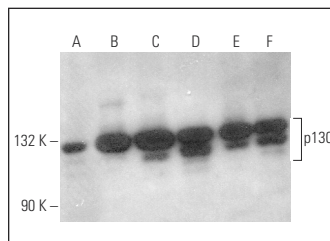
Molecular Weight of p130: 130 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, PC-12 cell lysate: sc-2250 or KNRK whole cell lysate: sc-2214.

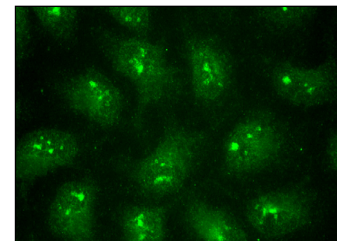
STORAGE

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

DATA



p130 (A-10): sc-374521. Western blot analysis of p130 expression in C3H/10T1/2 (A), HEK293 (B), NIH/3T3 (C), PC-12 (D), KNRK (E) and RAW 309 Cr.1 (F) whole cell lysates.



p130 (A-10): sc-374521. Immunofluorescence staining of methanol-fixed HeLa cells showing nucleolar and nuclear localization.

SELECT PRODUCT CITATIONS

- Xu, J., et al. 2017. The β-TrCP-FBXW2-SKP2 axis regulates lung cancer cell growth with FBXW2 acting as a tumour suppressor. *Nat. Commun.* 8: 14002.
- Zhang, H., et al. 2018. Targeting CDK9 reactivates epigenetically silenced genes in cancer. *Cell* 175: 1244-1258.e26.
- Lucchesi, C.A., et al. 2019. Disruption of the Rbm38-eIF4E complex with a synthetic peptide Pep8 increases p53 expression. *Cancer Res.* 79: 807-818.
- Grunblatt, E., et al. 2020. MYCN drives chemoresistance in small cell lung cancer while USP7 inhibition can restore chemosensitivity. *Genes Dev.* 34: 1210-1226.
- Sun, W., et al. 2021. Fine-tuning p53 activity by modulating the interaction between eukaryotic translation initiation factor eIF4E and RNA-binding protein RBM38. *Genes Dev.* 35: 542-555.
- Rajasekaran, S., et al. 2021. Integrated multi-omics analysis of RB-loss identifies widespread cellular programming and synthetic weaknesses. *Commun. Biol.* 4: 977.
- Laubach, K.N., et al. 2022. p73α1, a p73 C-terminal isoform, regulates tumor suppression and the inflammatory response via Notch1. *Proc. Natl. Acad. Sci. USA* 119: e2123202119.
- Liang, H., et al. 2022. Schisandrol B protects against cholestatic liver injury by inhibiting pyroptosis through pregnane X receptor. *Biochem. Pharmacol.* 204: 115222.
- Tian, J., et al. 2022. Pregnane X receptor promotes liver enlargement in mice through the spatial induction of hepatocyte hypertrophy and proliferation. *Chem. Biol. Interact.* E-published.

RESEARCH USE

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