

Nopp140 (E-7): sc-374033

BACKGROUND

Nopp140, previously named p130, is a nucleolar phosphoprotein that has been shown to exist in multiple forms with different sizes. Nopp140 functions both as a chaperone for import and/or export from the nucleolus and as a transcription factor. Nopp140 was originally identified from rat liver as an NLS (nuclear localization signal)-binding protein, and has been further characterized as an RNAP (RNA Polymerase)-interacting protein. Nopp140 also associates with the general transcription factor TFIIB, and the protein kinase casein kinase II (CKII). CKII heavily phosphorylates Nopp140 to mediate binding of Nopp140 to NLS. Nopp140 colocalizes with another nucleolar protein, NAP57, in the nucleolus and coiled bodies, and is thought to be involved in activities carried out within the nucleolus.

CHROMOSOMAL LOCATION

Genetic locus: NOLC1 (human) mapping to 10q24.32; Nolc1 (mouse) mapping to 19 C3.

SOURCE

Nopp140 (E-7) is a mouse monoclonal antibody raised against amino acids 620-699 mapping at the C-terminus of Nopp140 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-374033 X, 200 µg/0.1 ml.

Nopp140 (E-7) is available conjugated to agarose (sc-374033 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-374033 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-374033 PE), fluorescein (sc-374033 FITC), Alexa Fluor® 488 (sc-374033 AF488), Alexa Fluor® 546 (sc-374033 AF546), Alexa Fluor® 594 (sc-374033 AF594) or Alexa Fluor® 647 (sc-374033 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-374033 AF680) or Alexa Fluor® 790 (sc-374033 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

Nopp140 (E-7) is recommended for detection of Nopp140 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 Nopp140 siRNA (h): sc-38127, Nopp140 siRNA (m): sc-38128, Nopp140 shRNA Plasmid (h): sc-38127-SH, Nopp140 shRNA Plasmid (m): sc-38128-SH, Nopp140 shRNA (h) Lentiviral Particles: sc-38127-V and Nopp140 shRNA (m) Lentiviral Particles: sc-38128-V.

Nopp140 (E-7) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

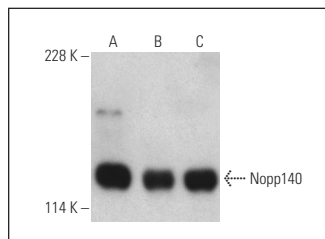
Molecular Weight of Nopp140: 140 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, PC-3 cell lysate: sc-2220 or NTERA-2 cl.D1 whole cell lysate: sc-364181.

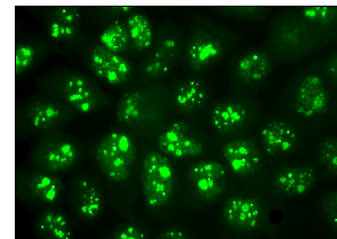
STORAGE

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

DATA



Nopp140 (E-7) HRP: sc-374033 HRP. Direct western blot analysis of Nopp140 expression in PC-3 (A), K-562 (B) and NTERA-2 cl.D1 (C) whole cell lysates.



Nopp140 (E-7): sc-374033. Immunofluorescence staining of formalin-fixed A-431 cells showing nucleolar and nuclear localization.

SELECT PRODUCT CITATIONS

- Yuan, F., et al. 2017. Nucleolar and coiled-body phosphoprotein 1 (NOLC1) regulates the nucleolar retention of TRF2. *Cell Death Discov.* 3: 17043.
- Li, Y., et al. 2017. NS5ATP13 promotes liver fibrogenesis via activation of hepatic stellate cells. *J. Cell. Biochem.* 118: 2463-2473.
- Yuan, F., et al. 2018. Nucleolar TRF2 attenuated nucleolus stress-induced HCC cell-cycle arrest by altering rRNA synthesis. *Cell Death Dis.* 9: 518.
- Sirri, V., et al. 2019. Sirtuin 7 promotes 45S pre-rRNA cleavage at site 2 and determines the processing pathway. *J. Cell Sci.* 132: jcs228601.
- Napoli, M., et al. 2020. Pan-cancer analysis reveals TAp63-regulated oncogenic lncRNAs that promote cancer progression through Akt activation. *Nat. Commun.* 11: 5156.
- Ardehali, M.B., et al. 2021. Elongin A associates with actively transcribed genes and modulates enhancer RNA levels with limited impact on transcription elongation rate *in vivo*. *J. Biol. Chem.* 296: 100202.
- Kliza, K.W., et al. 2021. Reading ADP-ribosylation signaling using chemical biology and interaction proteomics. *Mol. Cell* 81: 4552-4567.e8.
- Pronot, M., et al. 2021. Proteomic identification of an endogenous synaptic SUMOylome in the developing rat brain. *Front. Mol. Neurosci.* 14: 780535.
- Pronot, M., et al. 2022. Bidirectional regulation of synaptic SUMOylation by group 1 metabotropic glutamate receptors. *Cell. Mol. Life Sci.* 79: 378.
- Courchaine, E., et al. 2022. The coilin N-terminus mediates multivalent interactions between coilin and Nopp140 to form and maintain Cajal bodies. *Nat. Commun.* 13: 6005.
- Sochacka, M., et al. 2022. FGF12 is a novel component of the nucleolar NOLC1/TCOF1 ribosome biogenesis complex. *Cell Commun. Signal.* 20: 182.

RESEARCH USE

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

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