## For Research Use Only

## NCAPH Monoclonal antibody

Catalog Number:67655-1-lg Featured Product

1 Publications



**Basic Information** 

Catalog Number:

GenBank Accession Number:

**Purification Method:** Protein A purification

67655-1-lg

BC024211

Size:

GeneID (NCBI): 23397

CloneNo.: 3D2F11

150ul, Concentration: 700 ug/ml by Nanodrop and 500 ug/ml by Bradford  $\,$  UNIPROT ID:

Recommended Dilutions:

method using BSA as the standard;

Q15003 Full Name: WB 1:5000-1:50000

Source Mouse

non-SMC condensin I complex,

IHC 1:500-1:2000 IF-P 1:200-1:800

Isotype: lgG1

AG27748

subunit H Calculated MW:

Immunogen Catalog Number:

741 aa, 83 kDa

Observed MW:

83-100 kDa

**Applications** 

**Tested Applications:** 

WB, IHC, IF-P, ELISA

**Cited Applications:** 

Species Specificity: Human, mouse, rat

Cited Species:

Positive Controls:

WB: HeLa cells, HEK-293 cells, NIH/3T3 cells, Jurkat

cells, K-562 cells, HSC-T6 cells, 4T1 cells

IHC: human liver cancer tissue, human colon cancer

IF-P: human liver cancer tissue,

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

**Background Information** 

 $Non-SMC\ condensin\ I\ complex\ subunit\ H\ (NCAPH)\ is\ one\ of\ the\ three\ non-SMC\ subunits\ in\ condensin\ I,\ which$ belongs to a recently defined superfamily of proteins termed kleisins. Another two non-SMC subunits, CAP-D2 and CAP-G, share a highly degenerate repeating motif known as HEAT repeat. Some studies show that each subunit is essential for viability and plays an important role in mitotic chromosome architecture and segregation. In recent years, researchers found that the high expression of NCAPH was associated with poor prognosis in patients with non $small\ cell\ lung\ cancer\ and\ prostate\ cancer.\ Downregulation\ of\ NCAPH\ inhibited\ the\ proliferation,\ migration,\ and$ invasion of several cancer cells significantly. Moreover, NCAPH was involved in the regulation of mature chromosome condensation and DNA damage. These data suggest that NCAPH may be a key carcinogen involved in the development and progression of human malignant tumors. (PMID: 28300828, PMID: 33311486)

## **Notable Publications**

Author **Pubmed ID** Application Journal Jeffrey A Klomp 38843331 Science

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

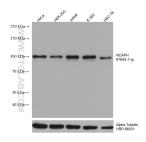
For technical support and original validation data for this product please contact:

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E: proteintech@ptglab.com W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

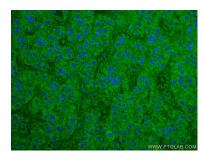
## **Selected Validation Data**



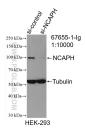
Various lysates were subjected to SDS PAGE followed by western blot with 67655-1-1g (NCAPH antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Alpha Tubulin Monoclonal antibody (HRP-66031) as loading control.



Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 67655-1-Ig (NCAPH antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed human liver cancer tissue using NCAPH antibody (67655-1-lg, Clone: 3D2F11) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L).



WB result of NCAPH antibody (67655-1-lg; 1:10000; incubated at room temperature for 1.5 hours) with sh-Control and sh-NCAPH transfected HEK-293 cells