

### **NCL Antibody (Center E443)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11680c

#### **Specification**

# NCL Antibody (Center E443) - Product Information

Application IF, WB, IHC-P,E

Primary Accession P19338

Other Accession <u>Q4R4J7</u>, <u>NP\_005372.2</u>

Reactivity
Predicted
Monkey
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region
Human
Monkey
Rabbit
Polyclonal
Rabbit IgG
76614
428-455

# NCL Antibody (Center E443) - Additional Information

#### **Gene ID 4691**

#### **Other Names**

Nucleolin, Protein C23, NCL

#### Target/Specificity

This NCL antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 428-455 amino acids from the Central region of human NCL.

#### **Dilution**

IF~~1:10~50 WB~~1:1000 IHC-P~~1:50~100

#### **Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

#### **Storage**

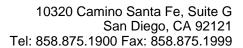
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

NCL Antibody (Center E443) is for research use only and not for use in diagnostic or therapeutic procedures.

#### NCL Antibody (Center E443) - Protein Information

### Name NCL





**Function** Nucleolin is the major nucleolar protein of growing eukaryotic cells. It is found associated with intranucleolar chromatin and pre-ribosomal particles. It induces chromatin decondensation by binding to histone H1. It is thought to play a role in pre-rRNA transcription and ribosome assembly. May play a role in the process of transcriptional elongation. Binds RNA oligonucleotides with 5'-UUAGGG- 3' repeats more tightly than the telomeric single-stranded DNA 5'- TTAGGG-3' repeats.

#### **Cellular Location**

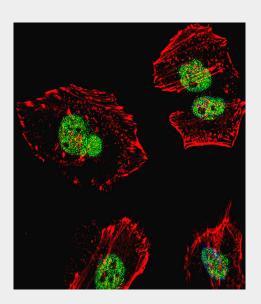
Nucleus, nucleolus. Cytoplasm. Note=Localized in cytoplasmic mRNP granules containing untranslated mRNAs

#### NCL Antibody (Center E443) - Protocols

Provided below are standard protocols that you may find useful for product applications.

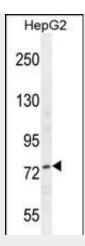
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# NCL Antibody (Center E443) - Images

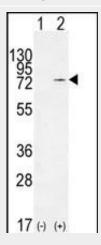


Fluorescent confocal image of Hela cell stained with NCL Antibody (Center E443)(Cat#AP11680c). Hela cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with NCL primary antibody (1:25, 1 h at 37°C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37°C). Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37°C). Nuclei were counterstained with DAPI (blue) (10  $\mu$ g/ml, 10 min). NCL immunoreactivity is localized to nucleus significantly.

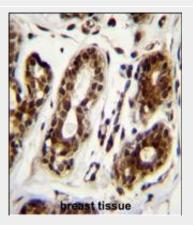




NCL Antibody (Center E443) (Cat. #AP11680c) western blot analysis in HepG2 cell line lysates (35ug/lane). This demonstrates the NCL antibody detected the NCL protein (arrow).



Western blot analysis of NCL (arrow) using rabbit polyclonal NCL Antibody (Center E443) (Cat. #AP11680c). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the NCL gene.



NCL Antibody (Center E443) (Cat. #AP11680c)immunohistochemistry analysis in formalin fixed and paraffin embedded human breast tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of NCL Antibody (Center E443) for immunohistochemistry. Clinical relevance has not been evaluated.

# NCL Antibody (Center E443) - Background

Nucleolin (NCL), a eukaryotic nucleolar phosphoprotein, is





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involved in the synthesis and maturation of ribosomes. It is located mainly in dense fibrillar regions of the nucleolus. Human NCL gene consists of 14 exons with 13 introns and spans approximately 11kb. The intron 11 of the NCL gene encodes a small nucleolar RNA, termed U20.

# **NCL Antibody (Center E443) - References**

Ishimaru, D., et al. J. Biol. Chem. 285(35):27182-27191(2010) Tulchin, N., et al. Am. J. Pathol. 176(3):1203-1214(2010) Strang, B.L., et al. J. Virol. 84(4):1771-1784(2010) Bertrand, L., et al. J. Virol. 84(1):109-118(2010) Jerke, U., et al. PLoS ONE 4 (12), E8302 (2009):