For Research Use Only

Nucleolin/C23 Recombinant antibody

Catalog Number:83380-1-RR



Basic Information

Catalog Number: GenBank Accession Number:

83380-1-RR BC006494

GeneID (NCBI): Size:

100ul , Concentration: 800 ug/ml by Nanodrop:

UNIPROT ID: P19338

Rabbit Full Name:

Isotype: nucleolin IgG Calculated MW:

Immunogen Catalog Number: 76 kDa

AG0859 Observed MW:

100-110 kDa

Purification Method:

Protein A purfication

CloneNo.: 240029F8

Recommended Dilutions:

WB 1:5000-1:50000

IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC 1:200-1:800 IF/ICC 1:125-1:500

Applications

Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

Species Specificity:

human

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

buffer pH 6.0

Positive Controls:

WB: HeLa cells, HEK-293 cells, Jurkat cells, K-562 cells,

MCF-7 cells IP: HeLa cells,

IHC: human lung cancer tissue,

IF/ICC: HepG2 cells,

Background Information

Nucleolin, also known as C23, involved in the control of transcription of ribosomal RNA (rRNA) genes by RNA polymerase I, in nucleocytoplasmic transportation of ribosomal components, and in ribosome maturation and assembly. It associated with intranucleolar chromatin and pre-ribosomal particles, and induced chromatin decondensation by binding to histione H1. Also it has a role in the process of transcriptional elongation. Whilst mammalian nucleolin has a predicted molecular mass of approximately 77 kDa, the apparent molecular mass is between 100 and 110 kDa, and has been attributed to the amino acid composition of the N-terminal domain, which is highly phosphorylated. (PMID: 15925566)

Storage

Storage:

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

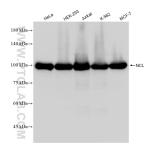
Storage Buffer

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

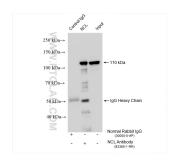
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

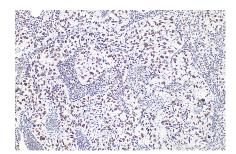
Selected Validation Data



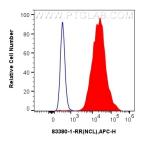
Various lysates were subjected to SDS PAGE followed by western blot with 83380-1-RR (Nucleolin/C23 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



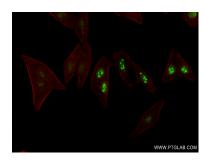
IP result of anti-Nucleolin/C23 (IP:83380-1-RR, 4ug; Detection:83380-1-RR 1:5000) with HeLa cells lysate 1085 ug.



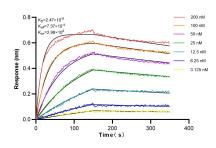
Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 83380-1-RR (Nucleolin/C23 antibody) at dilution of 1:400 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1x10^6 HEK-293 cells were intracellularly stained with 0.25 ug Nucleolin/C23 Recombinant antibody (83380-1-RR, Clone:240029F8) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using Nucleolin/C23 antibody (83380-1-RR, Clone: 240029F8) at dilution of 1:250 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red)



Biolayer interferometry (BLL) kinetic assays of 83380-1-RR against Human Nucleolin/C23 were performed. The affinity constant is 2.47 nM.