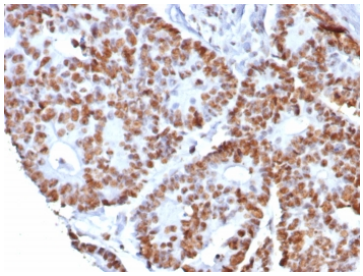
Nucleolin Antibody Recombinant Rabbit mAb NCL/8068R [clone NCL/8068R] (V4963)

Catalog No.	Formulation	Size
V4963-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V4963-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V4963SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

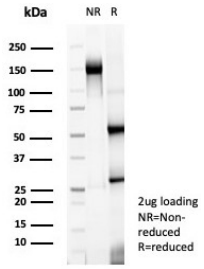
Recombinant RABBIT MONOCLONAL

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	NCL/8068R
Purity	Protein A/G affinity
UniProt	P19338
Localization	Nucleoli
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT
Limitations	This Nucleolin antibody is available for research use only.



Nucleolin Antibody Recombinant Rabbit mAb NCL/8068R immunohistochemistry analysis of human colon cancer tissue. Formalin-fixed paraffin-embedded human colon cancer stained with Nucleolin Antibody Recombinant Rabbit mAb NCL/8068R. HRP-DAB brown chromogenic staining highlights nuclei of tumor epithelial cells, consistent with the expected nuclear and nucleolar localization of Nucleolin / NCL. HIER: boil tissue sections in pH 9 10mM Tris with 1mM EDTA for 20 minutes and allow to cool before testing.



SDS-PAGE analysis of purified, BSA-free Nucleolin Antibody Recombinant Rabbit mAb NCL/8068R as confirmation of integrity and purity.

Description

Nucleolin (NCL) is a multifunctional nucleolar phosphoprotein that plays an essential role in ribosome biogenesis, ribosomal RNA transcription, and nucleolar organization. Encoded by the NCL gene on chromosome 2q37, nucleolin is one of the most abundant proteins present within the nucleolus of proliferating cells and participates in ribosomal RNA synthesis, RNA processing, and ribonucleoprotein complex assembly. The Nucleolin Antibody Recombinant Rabbit mAb NCL/8068R is designed to detect nucleolin expression in research studies examining nucleolar structure and ribosome production.

Nucleolin is primarily localized within the nucleus and nucleolus where it regulates transcription of ribosomal RNA genes and coordinates nucleolar architecture. In actively proliferating cells, nucleolin is highly enriched in nucleoli, producing a characteristic nuclear staining pattern frequently observed when detecting NCL protein expression. Because nucleolin levels correlate with cellular proliferation and metabolic activity, antibodies targeting NCL are widely used to study nucleolar biology and the molecular pathways that regulate protein synthesis.

Nucleolin contains several structural domains that support its diverse biological functions. The N-terminal acidic domain interacts with chromatin and ribosomal RNA transcription machinery. Four RNA recognition motifs located in the central region allow nucleolin to bind ribosomal RNA and other RNA molecules, while the glycine- and arginine-rich C-terminal region mediates interactions with nucleic acids and nucleolar proteins. Through these domains nucleolin coordinates ribosomal RNA transcription, RNA processing, and ribonucleoprotein assembly, processes that are tightly linked to cell growth and protein synthesis.

NCL antibody reagents are commonly referenced in the literature using several established synonyms for the protein. NCL antibody, nucleolin antibody, C23 nucleolin antibody, and nucleolar protein nucleolin antibody all refer to the same nucleolar phosphoprotein historically described as nucleolin nucleolar phosphoprotein. The designation C23 originates from early nucleolar protein fractionation experiments that identified nucleolin as a prominent nucleolar phosphoprotein associated with ribosomal transcription complexes. These alternative names remain widely used in studies of nucleolar biology and ribosome synthesis.

Nucleolin expression is frequently elevated in rapidly dividing cells and many tumor types where increased ribosome production supports enhanced protein synthesis. Because nucleolin displays a distinctive nuclear and nucleolar localization pattern, antibodies targeting this protein are valuable tools for examining nucleolin distribution and nucleolar function in cellular studies. The Nucleolin Antibody Recombinant Rabbit mAb NCL/8068R therefore supports research focused on nucleolin expression, ribosome biogenesis, and regulation of nucleolar activity.

Application Notes

Optimal dilution of the Nucleolin Antibody Recombinant Rabbit mAb NCL/8068R should be determined by the researcher.

Immunogen

Recombinant full-length human NCL protein was used as the immunogen for the Nucleolin antibody.

Storage

Aliquot the Nucleolin antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

NCL antibody, C23 nucleolin antibody, nucleolar protein nucleolin antibody, nucleolin nucleolar phosphoprotein antibody