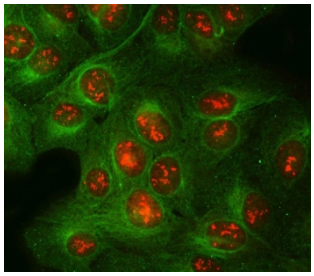
POLR2H Antibody / RNA Polymerase II Subunit Antibody (RQ8029)

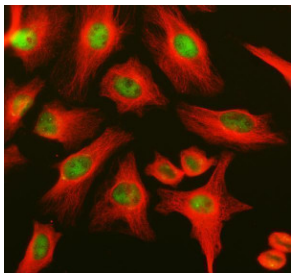
Catalog No.	Formulation	Size
RQ8029	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

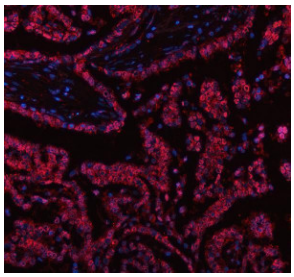
Availability	1-3 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P52434
Localization	Nuclear
Applications	Western blot: 0.5-1ug/ml Immunofluorescence: 5ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Direct ELISA: 0.1-0.5ug/ml Immunoprecipitation: 2ug per 500ug of lysate
Limitations	This POLR2H Antibody / RNA Polymerase II Subunit Antibody is available for research use only.



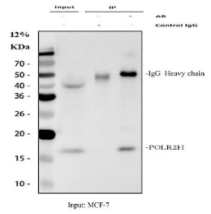
POLR2H Antibody U-2 OS Cell IF. Immunofluorescent staining of FFPE human U-2 OS cells with POLR2H Antibody (red) and alpha Tubulin antibody (green). HIER was performed by steaming tissue sections in pH 6 citrate buffer for 20 minutes prior to staining. POLR2H Antibody / RNA Polymerase II Subunit Antibody demonstrates nuclear staining consistent with RNA Polymerase II Subunit H expression and supports studies of transcription machinery, RNA polymerase complex function and gene expression regulation pathways.



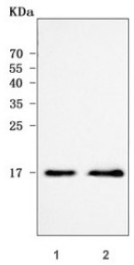
POLR2H Antibody HeLa Cell IF. Immunofluorescent staining of human HeLa cells with POLR2H Antibody (green) and alpha Tubulin antibody (red). Enzyme antigen retrieval was performed for 15 minutes, followed by blocking with 10% goat serum. Cells were incubated with rabbit anti-POLR2H antibody at 5 ug/ml and mouse anti-alpha Tubulin antibody overnight at 4Â°C, followed by Fluoro488 and Cy3 conjugated secondary antibodies. POLR2H Antibody / RNA Polymerase II Subunit Antibody demonstrates nuclear staining consistent with RNA Polymerase II Subunit H expression and supports studies of transcription machinery, RNA polymerase complex activity and gene expression regulation pathways.



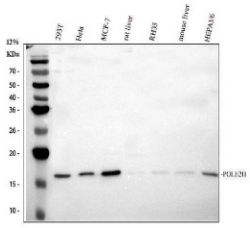
POLR2H Antibody Human Lung Cancer IF. Immunofluorescent staining of FFPE human lung cancer tissue with POLR2H Antibody at 5 ug/ml. HIER was performed using pH 8 EDTA buffer, followed by blocking with 10% goat serum. The tissue section was incubated with rabbit anti-POLR2H antibody overnight at 4Â°C, followed by Cy3 conjugated goat anti-rabbit IgG secondary antibody (red). Nuclei were counterstained with DAPI (blue). POLR2H Antibody / RNA Polymerase II Subunit Antibody demonstrates nuclear staining consistent with RNA Polymerase II Subunit H expression and supports studies of transcription machinery, RNA polymerase complex activity and gene expression regulation pathways.



POLR2H Antibody MCF-7 Cell IP. Immunoprecipitation of POLR2H protein from 500 ug of human MCF-7 whole cell lysate using 2 ug of POLR2H Antibody. Immunoprecipitated protein was analyzed by Western blot, with input lysate and rabbit IgG control samples included for comparison. A specific band was detected at approximately 17 kDa, consistent with the predicted molecular weight of RNA Polymerase II Subunit H. POLR2H Antibody / RNA Polymerase II Subunit Antibody successfully enriches endogenous POLR2H protein and supports studies of RNA polymerase complex formation, transcription machinery and gene expression regulation pathways.



POLR2H Antibody Human HeLa and MCF7 Cell WB. Western blot testing of human HeLa and MCF-7 cell lysates with POLR2H Antibody. Lane 1: human HeLa; Lane 2: human MCF-7. A specific band was detected at approximately 17 kDa, consistent with the predicted molecular weight of RNA Polymerase II Subunit H. POLR2H Antibody / RNA Polymerase II Subunit Antibody detects endogenous POLR2H expression and supports studies of transcription machinery, RNA polymerase complex function, chromatin-associated regulation and gene expression pathways.



POLR2H Antibody Human, Rat and Mouse WB. Western blot testing of human 293T, HeLa and MCF-7 cell lysates, rat liver tissue lysate, rat RH35 cell lysate, mouse liver tissue lysate and mouse HEPA1-6 cell lysate with POLR2H Antibody at 0.5 ug/ml. Lane 1: human 293T; Lane 2: human HeLa; Lane 3: human MCF-7; Lane 4: rat liver; Lane 5: rat RH35; Lane 6: mouse liver; Lane 7: mouse HEPA1-6. A specific band was detected at approximately 17 kDa, consistent with the predicted molecular weight. POLR2H Antibody / RNA Polymerase II Subunit Antibody detects endogenous RNA Polymerase II Subunit H expression and supports studies of transcription machinery, gene expression regulation and RNA polymerase complex function.

Description

POLR2H Antibody / RNA Polymerase II Subunit Antibody detects Polymerase II Subunit H, a highly conserved component of the RNA polymerase II enzyme complex responsible for transcription of protein-coding genes. RNA polymerase II is a multi-subunit molecular machine that synthesizes messenger RNA from DNA templates and coordinates one of the most fundamental processes in gene expression. POLR2H, also known as RPB8, contributes to

the structure and stability of the polymerase complex and is required for proper transcriptional activity within the nucleus. As part of the core transcription machinery, POLR2H supports the conversion of genetic information into functional RNA molecules and plays an essential role in maintaining regulated gene expression programs.

RNA polymerase II activity requires the coordinated function of multiple subunits, transcription factors and chromatin-associated regulatory proteins. POLR2H is one of the conserved polymerase subunits that contributes to enzyme assembly and interactions necessary for efficient transcription initiation and elongation. The RNA polymerase II complex works together with promoter-associated proteins, mediator complexes and chromatin remodeling pathways to determine transcriptional output. POLR2H Antibody is commonly used by researchers studying transcription regulation, nuclear protein complexes, RNA polymerase biology and mechanisms controlling gene expression.

Research involving POLR2H provides insight into the molecular systems that regulate cellular identity, growth and response to biological signals. Proper transcriptional control is required for processes such as differentiation, proliferation, development and adaptation to environmental changes. Because RNA polymerase II function is closely linked with chromatin organization and epigenetic regulation, POLR2H is frequently studied alongside transcription factors, histone modifications and other nuclear regulatory mechanisms. Disruption of transcriptional pathways is also an important area of investigation in cancer biology and disease research, where changes in gene expression programs can influence cellular behavior.

POLR2H, also referred to as RPB8, is shared among eukaryotic RNA polymerase complexes and represents an important structural element of transcription-associated machinery. Studies of RNA polymerase subunits help define how large nuclear protein complexes assemble, maintain stability and coordinate interactions with regulatory factors. Analysis of POLR2H expression and localization supports research into transcription complex formation, nuclear organization and the molecular control of RNA synthesis. These studies contribute to a broader understanding of how cells regulate information flow from DNA to RNA.

POLR2H Antibody applications include detection of RNA Polymerase II Subunit H expression, localization and regulation in biological samples using methods such as Western blot, immunohistochemistry, immunofluorescence and related protein analysis techniques. Evaluation of POLR2H supports studies of transcription machinery, RNA polymerase complex biology, chromatin-associated regulation and gene expression control. NSJ Bioreagents provides POLR2H Antibody / RNA Polymerase II Subunit Antibody for researchers studying transcription biology, nuclear regulation and RNA polymerase function.

POLR2H Antibody detects an RNA polymerase II complex protein involved in transcription regulation, mRNA synthesis and gene expression control, making it a useful marker for research areas featured in our Epigenetics Antibodies page.

Application Notes

Optimal dilution of the POLR2H Antibody / RNA Polymerase II Subunit Antibody should be determined by the researcher.

Immunogen

E. coli-derived recombinant human protein (amino acids D38-F150) was used as the immunogen for the POLR2H antibody.

Storage

After reconstitution, the POLR2H antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

RNA Polymerase II Subunit H Antibody, RPB8 Antibody, RNA Polymerase II 17.1 kDa Subunit Antibody, DNA Directed RNA Polymerase II Subunit H Antibody, Transcription Complex Protein Antibody, Polymerase Subunit Antibody

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