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# NSA1 Antibody

Catalog # ASC11096

## Product Information

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| **Application** | WB, IF, E, IHC-P |
| **Primary Accession** | Q6RFH5 |
| **Other Accession** | Q6RFH5, 55976441 |
| **Reactivity** | Human, Mouse, Rat |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | IgG |
| **Calculated MW** | 42441 |
| **Concentration (mg/ml)** | 1 mg/mL |
| **Conjugate** | Unconjugated |
| **Application Notes** | NSA1 antibody can be used for detection of NSA1 by Western blot at 1 - 2 g/mL. Antibody can also be used for immunohistochemistry starting at 5 g/mL. For immunofluorescence start at 20 g/mL. |

## Additional Information

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| **Gene ID** | 54663 |
| **Other Names** | WD repeat-containing protein 74, NOP seven-associated protein 1, WDR74, NSA1 |
| **Target/Specificity** | WDR74; |
| **Reconstitution & Storage** | NSA1 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures. |
| **Precautions** | NSA1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | WDR74 |
| **Synonyms** | NSA1 |
| **Function** | Regulatory protein of the MTREX-exosome complex involved in the synthesis of the 60S ribosomal subunit (PubMed:26456651). Participates in an early cleavage of the pre-rRNA processing pathway in cooperation with NVL (PubMed:29107693). Required for blastocyst formation, is necessary for RNA transcription, processing and/or stability during preimplantation development (By similarity). |

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| **Cellular Location** | Nucleus, nucleolus. Nucleus Note=Nucleolar location depends on active PolI transcription of pre- rRNA. |

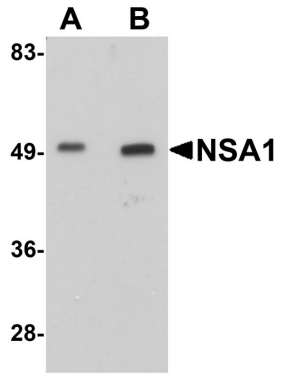
## Background

NSA1 Antibody: The yeast nucleolar protein NOP7 is necessary for the maturation of 66S preribosomes and interacts with numerous other proteins. One such protein is an essential, conserved WD repeat protein, NOP seven-associated protein 1 (NSA1), that is also required for the yeast 66S ribosome assembly. NSA1 is also associated with the AAA ATPase Rix7, and release of NSA1 from a novel late nucleolar pre-60S requires the Rix7 function. NSA1 has also been found upregulated in mammalian cancer cells, suggesting it may also play a role in cell proliferation.

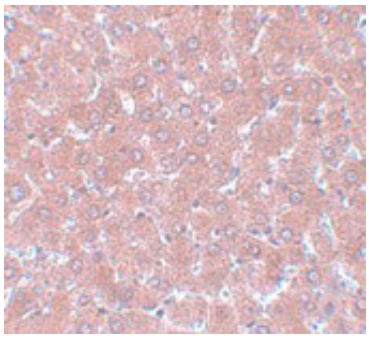
## References


Miles TD, Jakovljevic J, Horsey EW, et al. Ytm1, Nop7, and Erb1 form a complex necessary for maturation of yeast 66S preribosomes. Mol. Cell Biol.2005; 25:10419-32.
Harnpicharnchai P, Jakovljevic J, Horsey E, et al. Composition and functional characterization of yeast 66S ribosome assembly intermediates. Mol. Cell2001; 8:505-15.
Kressler D, Roser D, Pertschy B, et al. The AAA ATPase Rix7 powers progression of ribosome biogenesis by stripping Nsa1 from pre-60S particles. J. Cell Biol.2008; 181:935-44.
Krol M, Polanska J, Pawlowski KM, et al. Transcriptomic signature of cell lines isolated from canine mammary adenocarcinoma metastases to lungs. J. Appl. Genet.2010; 51:37-50.


## Images

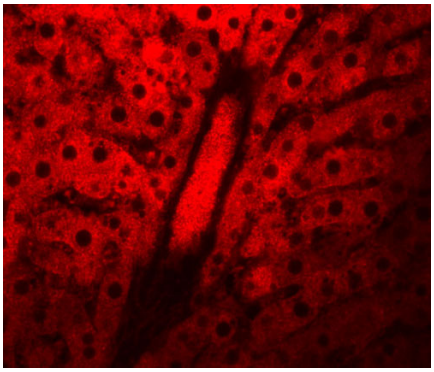



Western blot analysis of NSA1 in mouse liver tissue lysate with NSA1 antibody at (A) 1 and (B) 2 µg/mL.



Immunohistochemistry of NSA1 in rat liver tissue with NSA1 antibody at 5 µg/mL.

Immunofluorescence of NSA1 in rat liver tissue with NSA1 antibody at 20 µg/mL.



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