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NASP Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP4911a

Product Information

Application	WB, FC, E
Primary Accession	P49321
Reactivity	Human
Predicted	Mouse, Rat, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB15561
Calculated MW	85238
Antigen Region	152-180

Additional Information

Gene ID	4678
Other Names	Nuclear autoantigenic sperm protein, NASP, NASP
Target/Specificity	This NASP antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 152-180 amino acids from the N-terminal region of human NASP.
Dilution	WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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	NASP Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	NASP
Function	Component of the histone chaperone network (PubMed: 22195965). Binds and stabilizes histone H3-H4 not bound to chromatin to maintain a soluble reservoir and modulate degradation by chaperone-mediated autophagy (PubMed:22195965). Required for DNA replication, normal cell cycle

progression and cell proliferation. Forms a cytoplasmic complex with HSP90 and H1 linker histones and stimulates HSP90 ATPase activity. NASP and H1 histone are subsequently released from the complex and translocate to the nucleus where the histone is released for binding to DNA.

Cellular Location Cytoplasm {ECO:0000250|UniProtKB:Q99MD9}. Nucleus {ECO:0000250|UniProtKB:Q99MD9}

Tissue Location Isoform 1 is testis- and sperm-specific.

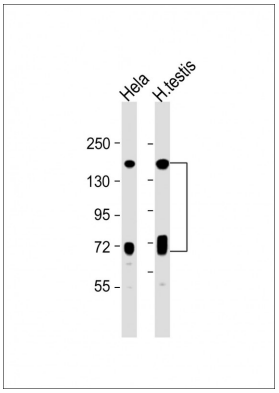
Background

NASP encodes a H1 histone binding protein that is involved in transporting histones into the nucleus of dividing cells. Multiple isoforms are encoded by transcript variants of this gene. The somatic form is expressed in all mitotic cells, is localized to the nucleus, and is coupled to the cell cycle. The testicular form is expressed in embryonic tissues, tumor cells, and the testis. In male germ cells, this protein is localized to the cytoplasm of primary spermatocytes, the nucleus of spermatids, and the periacrosomal region of mature spermatozoa.

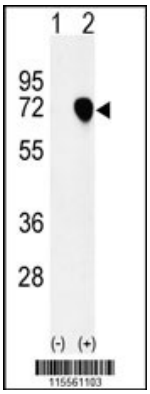
References

Alekseev, O.M., et al. Reprod. Biol. Endocrinol. 7, 45 (2009)
Wang, H., et al. Nucleic Acids Res. 36(18):5763-5772(2008)
Sugiyama, N., et al. Mol. Cell Proteomics 6(6):1103-1109(2007)

Images

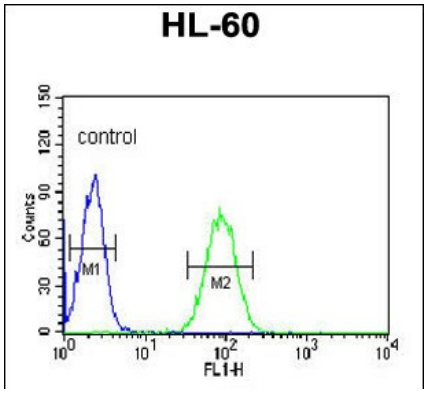


All lanes : Anti-NASP Antibody (N-term) at 1:1000 dilution Lane 1: Hela whole cell lysate Lane 2: human testis lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 85 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot analysis of NASP (arrow) using rabbit polyclonal NASP Antibody (N-term) (Cat. #AP4911a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the NASP gene (Lane 2) .

NASP Antibody (N-term) (Cat. #AP4911a) flow cytometric analysis of HL-60 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the



analysis.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.