

SPIN1 Antibody (N-term) Blocking Peptide Synthetic peptide

Catalog # BP8827a

Specification

SPIN1 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession Other Accession

<u>Q9Y657</u> <u>NP_006708</u>

SPIN1 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 10927

Other Names Spindlin-1, Ovarian cancer-related protein, Spindlin1, SPIN1, OCR, SPIN

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP8827a was selected from the N-term region of human SPIN1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions This product is for research use only. Not for use in diagnostic or therapeutic procedures.

SPIN1 Antibody (N-term) Blocking Peptide - Protein Information

Name SPIN1 (HGNC:11243)

Function

Chromatin reader that specifically recognizes and binds histone H3 both trimethylated at 'Lys-4' and 'Lys-9' (H3K4me3K9me3) and is involved in piRNA-mediated retrotransposon silencing during spermatogenesis (PubMed:33574238). Plays a key role in the initiation of the PIWIL4-piRNA pathway, a pathway that directs transposon DNA methylation and silencing in the male embryonic germ cells, by promoting recruitment of DNA methylation machinery to transposons: binds young, but not old, LINE1 transposons, which are specifically marked with H3K4me3K9me3, and promotes the recruitment of PIWIL4 and SPOCD1 to transposons, leading to piRNA-directed DNA methylation (By similarity). Also recognizes and binds histone H3 both trimethylated at 'Lys-4' and asymmetrically dimethylated at 'Arg-8' (H3K4me3 and H3R8me2a) and acts as an activator of Wnt signaling pathway downstream of PRMT2 (PubMed:http://www.uniprot.org/citations/22258766"



target="_blank">22258766, PubMed:29061846). In case of cancer, promotes cell cancer proliferation via activation of the Wnt signaling pathway (PubMed:24589551). Overexpression induces metaphase arrest and chromosomal instability. Localizes to active rDNA loci and promotes the expression of rRNA genes (PubMed:21960006). May play a role in cell- cycle regulation during the transition from gamete to embryo (By similarity). Involved in oocyte meiotic resumption, a process that takes place before ovulation to resume meiosis of oocytes blocked in prophase I: may act by regulating maternal transcripts to control meiotic resumption (By similarity).

Cellular Location Nucleus. Nucleus, nucleolus

Tissue Location Highly expressed in ovarian cancer tissues.

SPIN1 Antibody (N-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

<u>Blocking Peptides</u>

SPIN1 Antibody (N-term) Blocking Peptide - Images

SPIN1 Antibody (N-term) Blocking Peptide - Background

SPIN1 may play a role in cell-cycle regulation during the transition from gamete to embryo (By similarity).

SPIN1 Antibody (N-term) Blocking Peptide - References

Gao,Y., et.al., Biochem. Biophys. Res. Commun. 335 (2), 343-350 (2005)Olsen,J.V., et.al., Cell 127 (3), 635-648 (2006)