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Spindlin-1 Polyclonal Antibody

Catalog # AP72568

Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	Q9Y657
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	29601

Additional Information

Gene ID	10927
Other Names	SPIN1; OCR; SPIN; Spindlin-1; Ovarian cancer-related protein
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications. IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

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: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).

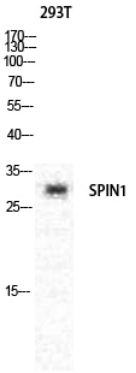
Cellular Location Nucleus. Nucleus, nucleolus

Tissue Location Highly expressed in ovarian cancer tissues.

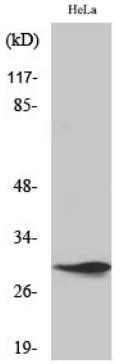
Background

Chromatin reader that specifically 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. 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. 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.

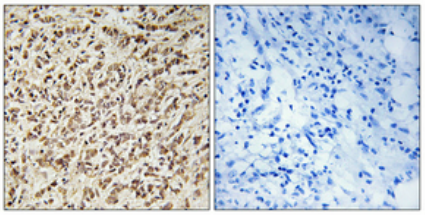
Images



Western Blot analysis of various cells using Spindlin-1 Polyclonal Antibody diluted at 1：1000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).



Western Blot analysis of HeLa cells using Spindlin-1 Polyclonal Antibody diluted at 1：1000 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003,Inventbiotech,MN,USA).



Immunohistochemical analysis of paraffin-embedded Human breast cancer. Antibody was diluted at 1:100(4°,overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.

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