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SPIDR Rabbit pAb

Catalog # AP96509

Product Information

Application	WB
Primary Accession	Q14159
Other Accession	Q14159
Reactivity	Human
Predicted	Rat, Mouse, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	100316
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SPIDR
Epitope Specificity	131-230/915
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBUNIT	Found in a complex, at least composed of BLM, RAD51 and SPIDR; the complex formation is mediated by SPIDR.Interacts (via C-terminal region) with BLM; the interaction is direct. Interacts with RAD51; the interaction is direct. Interacts (via the C-terminal region) with FIGNL1 (via N-terminal one-half region); the interaction is direct.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Plays a role in DNA double-strand break (DBS) repair via homologous recombination (HR). Serves as a scaffolding protein that helps to promote the recruitment of DNA-processing enzymes like the helicase BLM and recombinase RAD51 to site of DNA damage, and hence contributes to maintain genomic integrity.

Additional Information

Gene ID	23514
Other Names	KIAA0146; ODG9; SPIDR_HUMAN; SPIDR; Scaffolding protein involved in DNA repair; scaffold protein involved in DNA repair
Dilution	WB=1:500-2000
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	SPIDR {ECO:0000303|PubMed:23509288, ECO:0000312|HGNC:HGNC:28971}
Function	Involved in early stages DNA double-strand break (DSB) repair via homologous recombination (HR) (PubMed:23509288, PubMed:23754376, PubMed:34253720, PubMed:39169038). As part of the Shu complex, promotes HR by regulating replication protein-A (RPA) dynamics on single-stranded DNA, thereby stabilizing RAD51 and DMC1 filaments on DNA (PubMed:34253720, PubMed:39169038). The Shu complex is essential during meiosis by stabilizing DMC1 filaments (PubMed:27967308, PubMed:34697795). In contrast, it is critical for only certain types of homologous-directed DNA repair, such as inter-homolog homologous recombination (IR-HR) (PubMed:34253720). IR-HR is a DNA repair mechanism where a cell repairs a DSB on one chromosome using the matching homologous chromosome as a template, rather than the sister chromatid (PubMed:34253720).
Cellular Location	Chromosome. Nucleus. Note=Together with BLM, is redistributed in discrete nuclear DNA damage-induced foci following hydroxyurea (HU) or camptothecin (CPT) treatment.

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