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ZSWIM7 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP57155

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q19AV6
Reactivity	Rat, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	15386

Additional Information

Gene ID	125150
Other Names	Zinc finger SWIM domain-containing protein 7, SWIM domain-containing and Srs2-interacting protein 1 homolog, SWIM-type zinc finger domain-containing protein 7, ZSWIM7, SWS1
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
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	ZSWIM7 (HGNC:26993)
Function	Involved in early stages DNA double-strand break (DSB) repair via homologous recombination (HR) (PubMed:16710300, PubMed:21965664, PubMed:34253720, PubMed:39169038, PubMed:40345587). Forms a heterodimeric complex with ZSWIM7/SWS1 that 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, PubMed:40345587). The SWSAP1-ZSWIM7/SWS1 heterodimer is essential during meiosis by stabilizing DMC1 filaments (PubMed:32719396, PubMed:33713115, PubMed:34402903). 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

Tissue Location	Expressed in ovary and testis.

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