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Stella Rabbit pAb

Catalog # AP98565

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q6W0C5
Other Accession	Q6W0C5
Reactivity	Mouse
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	17851
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Stella/DPPA3
Epitope Specificity	101-159/159
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
DISEASE	Expressed in fetal ovary.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes a protein that in mice may function as a maternal factor during the preimplantation stage of development. In mice, this gene may play a role in transcriptional repression, cell division, and maintenance of cell pluripotentiality. In humans, related intronless loci are located on chromosomes 14 and X. [provided by RefSeq, Jul 2008]

Additional Information

Gene ID	359787
Other Names	Pgc7; STELLA; 2410075G02Rik; PCG7; DPPA3_HUMAN; DPPA3; Stella-related protein; STELLAR; DPPA3_MOUSE; Compaction-associated protein 1; Primordial germ cell protein 7; Cap1p; Crg1; DPPA3_RAT; developmental pluripotency associated 3
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
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	DPPA3

Synonyms	STELLAR
Function	Primordial germ cell (PGCs)-specific protein involved in epigenetic chromatin reprogramming in the zygote following fertilization (PubMed:35314832). In zygotes, DNA demethylation occurs selectively in the paternal pronucleus before the first cell division, while the adjacent maternal pronucleus and certain paternally-imprinted loci are protected from this process (By similarity). Participates in protection of DNA methylation in the maternal pronucleus by preventing conversion of 5mC to 5hmC: specifically recognizes and binds histone H3 dimethylated at 'Lys-9' (H3K9me2) on maternal genome, and protects maternal genome from TET3-mediated conversion to 5hmC and subsequent DNA demethylation (By similarity). Does not bind paternal chromatin, which is mainly packed into protamine and does not contain much H3K9me2 mark (By similarity). Also protects imprinted loci that are marked with H3K9me2 in mature sperm from DNA demethylation in early embryogenesis (By similarity). May be important for the totipotent/pluripotent states continuing through preimplantation development (By similarity). Also involved in chromatin condensation in oocytogenesis (By similarity).
Cellular Location	Nucleus. Cytoplasm. Note=Mainly localizes in the female pronucleus, localization to the male pronucleus in much weaker {ECO:0000250|UniProtKB:Q8QZY3}
Tissue Location	Low expression in testis, ovary and thymus. Expressed in embryonic stem and carcinoma cells. Highly expressed in testicular germ cell tumors.

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