DPPA3 Antibody (C-term)

Catalog_no： AB3336

Reactivity： H

Category： 抗原抗体

Size： 100μL/50μL

Immunogen： HUMAN

Specificity： This DPPA3 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 145-179 amino acids from the C-terminal region of human DPPA3.

Dilution： WB,1:1000;

Other_name： Developmental pluripotency-associated protein 3, Stella-related protein, DPPA3, STELLAR

Isotype： Rabbit Ig

Background： Primordial germ cell (PGCs)-specific protein involved in epigenetic chromatin reprogramming in the zygote following fertilization. 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. 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. Does not bind paternal chromatin, which is mainly packed into protamine and does not contain much H3K9me2 mark. Also protects imprinted loci that are marked with H3K9me2 in mature sperm from DNA demethylation in early embryogenesis. May be important for the totipotent/pluripotent states continuing through preimplantation development. Also involved in chromatin condensation in oocytogenesis (By similarity).

reference： Payer B.,et al.Curr. Biol. 13:2110-2117(2003). Clark A.T.,et al.Stem Cells 22:169-179(2004). Julaton V.T.,et al.Hum. Mol. Genet. 20:2238-2250(2011). Bowles J.,et al.Cytogenet. Genome Res. 101:261-265(2003).