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Product Datasheet

Stella/DPPA3 Polyclonal Antibody GRP615

Description

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).

WB of GRP615

IHC-P of GRP615

Species/Host	Rabbit
Reactivity	Human
Conjugation	Unconjugated
Tested Applications	IHC-P, WB
Immunogen	KLH conjugated synthetic peptide derived from human Stella/DPPA3 (public_immunogen_range: 100-150/159)
Form/Appearance	Aqueous buffered solution containing 1% BSA, 50% glycerol and 0.09% sodium azide.
Concentration	lug/ul
Storage	Store at -20°C for 12 months.
Note	For research use only.
Isotype	lgG
Clonality	Polyclonal
Purity	Purified by Protein A.
Uniprot ID	Q6W0C5
Entrez	359787
Dilution Range	WB: 1:300-1000, IHC-P: 1:200-400