**German Research Products - GRP GmbH** 

In der Stockwiese 26

D-85410 Haag/Amper, Germany

Email: info@grp-ak.de Phone: +49 (0)8167 6335

## **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).

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 1ug/ul

Storage Store at -20°C for 12 months.

**Note** For research use only.

Isotype IgG

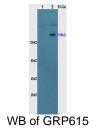
**Clonality** Polyclonal

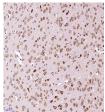
**Purity** Purified by Protein A.

Uniprot ID Q6W0C5

Entrez 359787

**Dilution Range** WB: 1:300-1000, IHC-P: 1:200-400





IHC-P of GRP615