

**DPPA3 Blocking Peptide (C-term)**

Synthetic peptide

Catalog # BP21453b

**Specification**

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**DPPA3 Blocking Peptide (C-term) - Product Information**

Primary Accession

[Q6W0C5](#)**DPPA3 Blocking Peptide (C-term) - Additional Information**

Gene ID 359787

**Other Names**

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

**Target/Specificity**

The synthetic peptide sequence is selected from aa 145-159 of HUMAN DPPA3

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**DPPA3 Blocking Peptide (C-term) - Protein Information**

Name DPPA3

Synonyms STELLAR

**Function**

Primordial germ cell (PGCs)-specific protein involved in epigenetic chromatin reprogramming in the zygote following fertilization (PubMed:<a href="http://www.uniprot.org/citations/35314832" target="\_blank">35314832</a>). 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 is 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.

**DPPA3 Blocking Peptide (C-term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

**DPPA3 Blocking Peptide (C-term) - Images****DPPA3 Blocking Peptide (C-term) - Background**

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**DPPA3 Blocking Peptide (C-term) - References**

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).