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ZP2 Rabbit pAb

Catalog # AP99038

Product Information

Application	IHC-P, IHC-F, IF
Reactivity	Rat, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	76 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from mouse ZP2
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the ZP domain family. ZPA subfamily. Contains 1 ZP domain.
SUBUNIT	Polymers of ZP2 and ZP3 organized into long filaments cross-linked by ZP1 homodimers.
Post-translational modifications	Proteolytically cleaved before the transmembrane segment to yield the secreted ectodomain incorporated in the zona pellucida. Additional proteolytically cleavage of the N-terminal peptide of 30 kDa occurs in one-cell and two-cell embryos (By similarity). Proteolytically cleaved in the N-terminal part probably by the metalloendopeptidase ASTL exocytosed from cortical granules after fertilization, yielding a N-terminal peptide of about 30 kDa which remains covalently attached to the C-terminal peptide via disulfide bond(s). This cleavage may play an important role in the post-fertilization block to polyspermy. -glycosylated; N-linked glycans are of high-mannose/hybrid type, as well as bi-, tri- and tetra-antennary sialylated complex types. O-glycosylated; contains sulfate-substituted glycans.
DISEASE	Proteolytically cleaved before the transmembrane segment to yield the secreted ectodomain incorporated in the zona pellucida. Proteolytically cleaved in the N-terminal part after fertilization, yielding a N-terminal peptide of about 30 kDa which remains covalently attached to the C-terminal peptide via disulfide bond(s). This cleavage may play an important role in the post-fertilization block to polyspermy. O-glycosylated; contains sulfate-substituted glycans.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The zona pellucida is an extracellular matrix that surrounds the oocyte and early embryo. It is composed of three glycoproteins with various functions during fertilization and preimplantation development. The glycosylated mature peptide is one of the structural components of the zona pellucida and functions in secondary binding and penetration of acrosome-reacted spermatozoa. Female mice lacking this gene do not form a stable zona matrix and are sterile. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2014]

Additional Information

Other Names	OOMD6; OZEMA6; ZPA; Zp-2; ZP2_HUMAN; ZP2; Zona pellucida glycoprotein 2 (Zp-2); Zona pellucida protein A; zona pellucida glycoprotein 2; zona pellucida glycoprotein 2 (sperm receptor); zona pellucida 2
Dilution	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.
Name	ZP2 Rabbit pAb
Function	The mammalian zona pellucida, which mediates species-specific sperm binding, induction of the acrosome reaction and prevents post-fertilization polyspermy, is composed of three to four glycoproteins, ZP1, ZP2, ZP3, and ZP4. ZP2 may act as a secondary sperm receptor.

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