

Product name:	ZP2 Rabbit Polyclonal Antibody
Cat number:	ABN20307
Conjugate:	Unconjugated
Size:	100µL
Clone:	Polyclonal
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	Synthesized peptide derived from the Internal region of human ZP2.
Reactivity:	Human,Rat,Mouse
Applications:	IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:20000-1:40000
Purification:	Affinity purification
Form:	Liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles.

Background:

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],developmental stage:Expressed during the 2-week growth phase of oogenesis, prior to ovulation.,domain:The ZP domain is involved in the polymerization of the ZP proteins to form the zona pellucida.,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.,PTM:O-glycosylated; contains sulfate-substituted glycans.,PTM:Proteolytically cleaved before the transmembrane segment to yield the secreted ectodomain incorporated in the zona pellucida.,PTM: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.,similarity:Belongs to the ZP domain family. ZPA subfamily.,similarity:Contains 1 ZP domain.,subunit:Polymers of ZP2 and ZP3 organized into long filaments cross-linked by ZP1 homodimers.,tissue specificity:Oocytes.,