

# Rabbit Anti-ZP2 antibody

# SL12790R

Product Name:	ZP2
Chinese Name:	卵透明带glycoprotein2抗体
Alias:	OTTHUMP00000115849; Processed zona pellucida sperm-binding protein 2; Zona pellucida glycoprotein 2; zona pellucida glycoprotein ZP2; Zona pellucida protein A; Zp-2; ZP2; ZP2 HUMAN; ZPA.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	78kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human ZP2:39-120/745 <extracellular></extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. 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.
PubMed:	<u>PubMed</u>
Product Detail:	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]

#### 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.

#### Subunit:

Polymers of ZP2 and ZP3 organized into long filaments cross-linked by ZP1 homodimers.

#### **Subcellular Location:**

Cell membrane; Single-pass type I membrane protein. Processed zona pellucida spermbinding protein 2: Secreted, extracellular space, extracellular matrix. Note=The glycoproteinaceous translucent extracellular matrix that surrounds the mammalian oocyte is called zona pellucida.

# Tissue Specificity:

Oocytes.

#### 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.

# Similarity:

Belongs to the ZP domain family.

ZPA subfamily.

Contains 1 ZP domain.

### **SWISS:**

Q05996

#### Gene ID:

7783

## Database links:

Entrez Gene: 7783 Human

Omim: 182888 Human

SwissProt: Q05996 Human

Unigene: 73982 Human

# Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

