

Anti-ZP2 antibody



Description Rabbit polyclonal to ZP2.

Model STJ96360

Host Rabbit

Reactivity Human

Applications ELISA, IHC

Immunogen Synthesized peptide derived from human ZP2.

Immunogen Region Internal

Gene ID <u>7783</u>

Gene Symbol ZP2

Dilution range IHC 1:100-1:300ELISA 1:40000

Specificity ZP2 Polyclonal Antibody detects endogenous levels of ZP2 protein.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Zona pellucida sperm-binding protein 2 Zona pellucida glycoprotein 2 Zp-2

Zona pellucida protein A Processed zona pellucida sperm-binding protein 2

Molecular Weight 82.357 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links HGNC:131880MIM:182888

Alternative Names Zona pellucida sperm-binding protein 2 Zona pellucida glycoprotein 2 Zp-2

Zona pellucida protein A Processed zona pellucida sperm-binding protein 2

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.

Sequence and Domain Family The ZP domain is involved in the polymerization of the ZP proteins to form

the zona pellucida.

Cellular Localization Processed zona pellucida sperm-binding protein 2: Secreted, extracellular

space, extracellular matrix. The glycoproteinaceous translucent extracellular matrix that surrounds the mammalian oocyte is called zona pellucida. Cell

membrane

Post-translational Proteolytically cleaved before the transmembrane segment to yield the

secreted ectodomain incorporated in the zona pellucida. Proteolytically

cleaved in the N-terminal part 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. Additional proteolytically cleavage of the N-terminal peptide of 30 kDa occurs in one-cell and two-cell embryos. N-

glycosylated. O-glycosylated; contains sulfate-substituted glycans.

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Modifications

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