

**ZP4 Antibody (C-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP12724b****Specification**

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**ZP4 Antibody (C-term) Blocking peptide - Product Information**Primary Accession [Q12836](#)**ZP4 Antibody (C-term) Blocking peptide - Additional Information****Gene ID** 57829**Other Names**

Zona pellucida sperm-binding protein 4, Zona pellucida glycoprotein 4, Zp-4, Zona pellucida protein B, Processed zona pellucida sperm-binding protein 4, ZP4, ZPB

**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.

**ZP4 Antibody (C-term) Blocking peptide - Protein Information****Name** ZP4**Synonyms** ZPB**Function**

Component of the zona pellucida, an extracellular matrix surrounding oocytes which mediates sperm binding, induction of the acrosome reaction and prevents post-fertilization polyspermy. The zona pellucida is composed of 3 to 4 glycoproteins, ZP1, ZP2, ZP3, and ZP4. ZP4 may act as a sperm receptor.

**Cellular Location**[Processed zona pellucida sperm-binding protein 4]: Zona pellucida  
{ECO:0000250|UniProtKB:Q00193}**Tissue Location**

Expressed in oocytes.

**ZP4 Antibody (C-term) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

#### **ZP4 Antibody (C-term) Blocking peptide - Images**

#### **ZP4 Antibody (C-term) Blocking peptide - Background**

The zona pellucida is an extracellular matrix that surrounds the oocyte and early embryo. It is composed primarily of three or four glycoproteins with various functions during fertilization and preimplantation development. The nascent protein contains a N-terminal signal peptide sequence, a conserved ZP domain, a consensus furin cleavage site, and a C-terminal transmembrane domain. It is hypothesized that furin cleavage results in release of the mature protein from the plasma membrane for subsequent incorporation into the zona pellucida matrix. However, the requirement for furin cleavage in this process remains controversial based on mouse studies. Previously, this gene has been referred to as ZP1 or ZPB and thought to have similar functions as mouse Zp1. However, a human gene with higher similarity and chromosomal synteny to mouse Zp1 has been assigned the symbol ZP1 and this gene has been assigned the symbol ZP4.

#### **ZP4 Antibody (C-term) Blocking peptide - References**

Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :McCauley, J.L., et al. Genes Immun. 10(7):624-630(2009) Nakano, M., et al. Proc. Natl. Acad. Sci. U.S.A. 106(31):12838-12842(2009) Choudhury, S., et al. J. Reprod. Immunol. 79(2):137-147(2009) Chiu, P.C., et al. Biol. Reprod. 79(5):869-877(2008)