



Anti-ZP3 (aa 342-391) polyclonal antibody (CPBT-48718RH)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Rabbit Polyclonal antibody to Human ZP3.
Antigen Description	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 protein encoded by this gene is a structural component of the zona pellucida and functions in primary binding and induction of the sperm acrosome reaction. The nascent protein contains a N-terminal signal peptide sequence, a conserved ZP domain, a C-terminal consensus furin cleavage site, and a 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. A variation in the last exon of this gene has previously served as the basis for an additional ZP3 locus; however, sequence and literature review reveals that there is only one full-length ZP3 locus in the human genome. Another locus encoding a bipartite transcript designated POMZP3 contains a duplication of the last four exons of ZP3, including the above described variation, and maps closely to this gene.
Immunogen	A region within synthetic peptide: QWSRSASRNR RHVTEEADVT VGPLIFLDRR GDHEVEQWAL PSDTSVLLG, corresponding to internal sequence amino acids 342-391 of Human ZP3
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human
Purification	Protein A purified
Conjugate	Unconjugated

Applications	ICC, WB
Cellular Localization	Cell membrane; single-pass type I membrane protein. Secreted upon proteolytic cleavage.
Format	Liquid
Size	100 µg
Buffer	Preservative: NoneConstituents: 2% Sucrose, PBS
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

GENE INFORMATION

Gene Name	ZP3 zona pellucida glycoprotein 3 (sperm receptor) [Homo sapiens]
Official Symbol	ZP3
Synonyms	ZP3; zona pellucida glycoprotein 3 (sperm receptor); zona pellucida glycoprotein 3A (sperm receptor) , ZP3A, ZP3B; zona pellucida sperm-binding protein 3; ZP3 372; ZP3 424; HUMZP3; Sperm receptor; zona pellucida glycoprotein 3 (sperm receptor); zona pellucida glycoprotein 3A (sperm receptor); Zona pellucida glycoprotein ZP3; Zona pellucida protein C; Zona pellucida sperm binding protein 3 precursor; ZP3 372; ZP3 424; ZP3 474; ZP3A; ZP3A/ZP3B; ZP3B; ZPC; ZP3A/ZP3B; sperm receptor; zona pellucida protein C; zona pellucida glycoprotein 3B; zona pellucida glycoprotein ZP3; zona pellucida glycoprotein 3A (sperm receptor); ZPC; ZP3A; ZP3B; Zp-3;
Entrez Gene ID	7784
Protein Refseq	NP_009086
UniProt ID	P21754
Chromosome Location	7q11.23
Pathway	Ovarian Infertility Genes, organism-specific biosystem;
Function	acrosin binding; manganese ion transmembrane transporter activity; protein binding; receptor activity; signal transducer activity; sugar binding;