



ZP3 mouse mAb

Catalog No	YP-mAb-08446
Isotype	IgG
Reactivity	Human; Mouse;Rat
Applications	WB
Gene Name	ZP3 ZP3A ZP3B ZPC
Protein Name	ZP3
Immunogen	Synthesized peptide derived from human ZP3 AA range: 210-260
Specificity	This antibody detects endogenous levels of ZP3 at Human/Mouse/Rat
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, mouse,IgG
Purification	The antibody was affinity-purified from mouse serum by affinity-chromatography using specific immunogen.
Dilution	WB 1: 500-2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Calculated Molecular Weight	47kD
Synonyms	
Cell Pathway	[Processed zona pellucida sperm-binding protein 3]: Zona pellucida .; Cell membrane ; Single-pass type I membrane protein .
Tissue Specificity	Expressed in oocytes (at protein level).
Function	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. ZP3 is essential for sperm binding and zona matrix formation.,online information:Molecular chastity -Issue 93 of April 2008,PTM:N-glycosylated.,PTM:O-glycosylated; removal of O-linked glycans may play an important role in the post-fertilization block to polyspermy.,PTM:Proteolytically cleaved before the transmembrane segment to yield the secreted ectodomain incorporated in the zona pellucida.,similarity:Belongs to the ZP domain family. ZPC subfamily.,similarity:Contains 1 ZP domain.,subunit:Polymers of ZP2 and ZP3 organized into long filaments cross-linked by
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 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. [provided by RefSeq, Jul 2008],

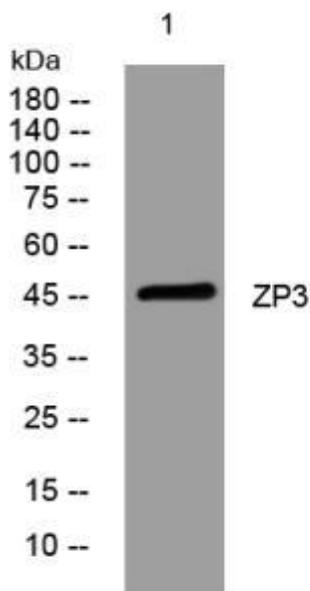
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western blot analysis of lysates from CACO2 cells, primary antibody was diluted at 1:1000, 4° over night