Product Name: ZP4 Rabbit Polyclonal Antibody
Catalog #: APRab20309

Summary

Production Name	ZP4 Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Rat,Mouse

Performance

Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	ZP4
Alternative Names	ZP4; ZPB; Zona pellucida sperm-binding protein 4; Zona pellucida glycoprotein 4; Zp-4; Zona pellucida protein B
Gene ID	57829.0
SwissProt ID	Q12836.The antiserum was produced against synthesized peptide derived from human ZP4. AA range:231-280

Application

Dilution Ratio	WB 1:500 - 1:2000. ELISA: 1:10000
Molecular Weight	65kD

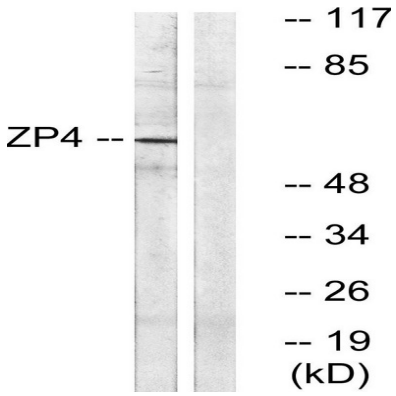
Product Name: ZP4 Rabbit Polyclonal Antibody
Catalog #: APRab20309

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 beendomain: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. ZP4 may act as a sperm receptor.,PTM:Proteolytically cleaved before the transmembrane segment to yield the secreted ectodomain incorporated in the zona pellucida.,similarity:Belongs to the ZP domain family. ZPB subfamily.,similarity:Contains 1 P-type (trefoil) domain.,similarity:Contains 1 ZP domain.,tissue specificity:Oocytes.,

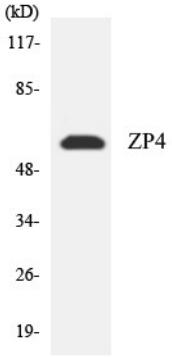
Research Area

Image Data



Western blot analysis of lysates from Jurkat cells, using ZP4 Antibody. The lane on the right is blocked with the synthesized peptide.

Product Name: ZP4 Rabbit Polyclonal Antibody
Catalog #: APRab20309



Western blot analysis of the lysates from HepG2 cells using ZP4 antibody.

Note

For research use only.