Best Tools for immunology Research

ZP4 Polyclonal Antibody

Catalog No :	YT4996
Reactivity :	Human;Rat;Mouse;
Applications :	WB;ELISA
Target :	ZP4
Gene Name :	ZP4
Protein Name :	Zona pellucida sperm-binding protein 4
Human Gene Id :	57829
Human Swiss Prot No :	Q12836
Immunogen :	The antiserum was produced against synthesized peptide derived from human ZP4. AA range:231-280
Specificity :	ZP4 Polyclonal Antibody detects endogenous levels of ZP4 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications.
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	65kD
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

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. 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.,

Subcellular Location : [Processed zona pellucida sperm-binding protein 4]: Zona pellucida .; Cell membrane ; Single-pass type I membrane protein .

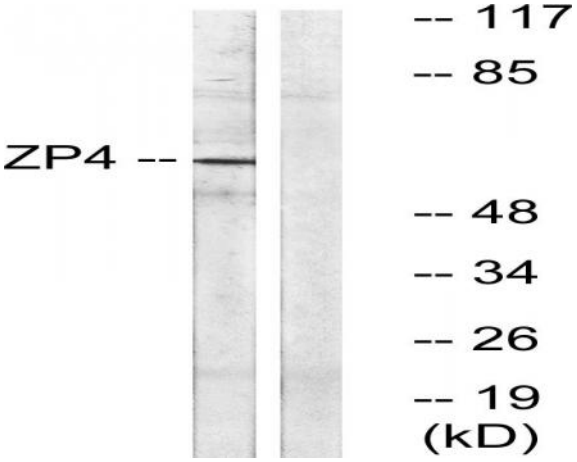
Expression : Expressed in oocytes.

Sort : 24778

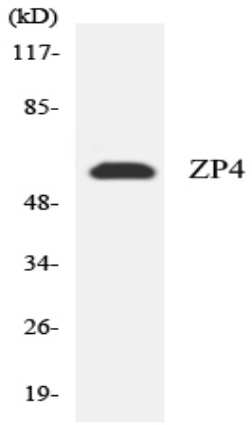
Host : Rabbit

Modifications : Unmodified

Products Images



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



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