

### **ZP1 Polyclonal Antibody**

Catalog No: YT4994

**Reactivity:** Human; Rat; Mouse;

**Applications:** WB;IHC;IF;ELISA

Target: ZP1

Gene Name: ZP1

**Protein Name:** Zona pellucida sperm-binding protein 1

Human Gene Id: 22917

**Human Swiss Prot** 

No:

P60852

**Mouse Swiss Prot** 

No:

ss Prot <u>Q62005</u>

Immunogen: The antiserum was produced against synthesized peptide derived from human

ZP1. AA range:221-270

**Specificity:** ZP1 Polyclonal Antibody detects endogenous levels of ZP1 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. IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200

**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: 70kD

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### **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 ensures the structural integrity of the zona pellucida. Mutations in this gene are a cause of oocyte maturation defect and infertility. [provided by RefSeq, May 2014],

### **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. ZP1 ensures the structural integrity of the zona pellucida.,PTM:O-glycosylated.,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.,subunit:Polymers of ZP2 and ZP3 organized into long filaments cross-linked by ZP1 homodimers.,tissue specificity:Oocytes.,

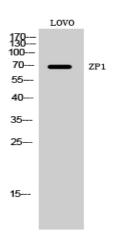
# Subcellular Location :

[Processed zona pellucida sperm-binding protein 1]: Zona pellucida .; Cell membrane ; Single-pass type I membrane protein .

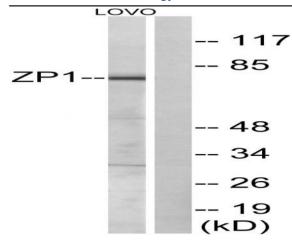
### **Expression:**

Expressed in oocytes (at protein level).

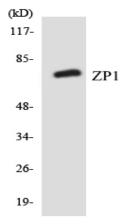
## **Products Images**



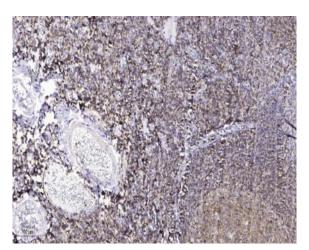
Western Blot analysis of LOVO cells using ZP1 Polyclonal Antibody. Secondary antibody(catalog#:RS0002) was diluted at 1:20000



Western blot analysis of lysates from LOVO cells, using ZP1 Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from HeLa cells using ZP1 antibody.



Immunohistochemical analysis of paraffin-embedded human tonsil. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA,pH9.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 45min).