

anti-Human ZP2 Polyclonal Antibody | anti-ZP2 antibody

Anti-ZP2 Antibody

CATALOG # AAA46499	REACTIVITY Human	APPLICATIONS Immunohistochemistry, Western Blot
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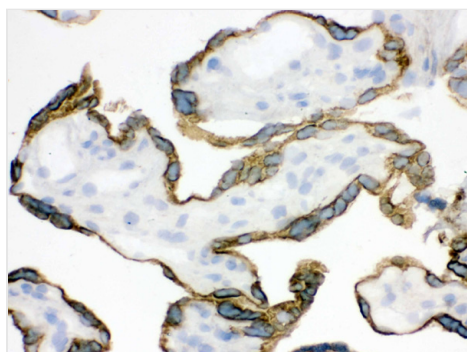
PRODUCT SYNONYMS

ZP2; Polyclonal Antibody; Anti-ZP2 Antibody; Zona pellucida sperm-binding protein 2; OTTHUMP00000115849; Processed zona pellucida sperm-binding protein 2; Zona pellucida glycoprotein 2; zona pellucida glycoprotein ZP2; Zona pellucida protein A; Zp-2; ZP2_HUMAN; ZPA; zona pellucida glycoprotein 2 (sperm receptor); anti-ZP2 antibody

PRODUCT SPECIFICATIONS

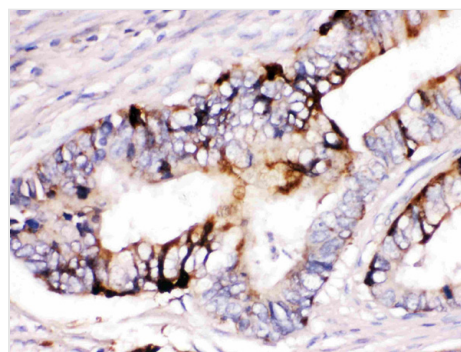
Reactivity	Human
Clonality	Polyclonal
Purity/Purification	Immunogen Affinity Purified
Form/Format	Lyophilized. Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Sequence Length	736
Applicable Applications for anti-ZP2 antibody	IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthetic peptide corresponding to a sequence at the N-terminus of human ZP2 (511-544aa ENEYPLVRFLRQPIYMEVRVLRDDPNIKLVLDD), different from the related mouse sequence by six amino acids, and from the related rat sequence by four amino acids.
Ig Type	Rabbit IgG
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Preparation and Storage	At -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquoted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



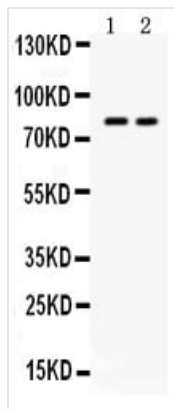
IHC (Immunohistochemistry)

Figure 3. IHC analysis of ZP2 using anti-ZP2 antibody (AAA46499). ZP2 was detected in frozen section of human placenta tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-ZP2 Antibody (AAA46499) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohistochemistry)

ZP2 was detected in paraffin-embedded sections of human intestinal cancer tissues using rabbit anti- ZP2 Antigen Affinity purified polyclonal antibody at 1ug/mL. The immunohistochemical section was developed using SABC method.



WB (Western Blot)

Western blot analysis of ZP2 expression in HELA whole cell lysates (lane 1) and HEPG2 whole cell lysates (lane 2). ZP2 at 82KD was detected using rabbit anti- ZP2 Antigen Affinity purified polyclonal antibody at 0.5 ug/mL. The blot was developed using chemiluminescence (ECL) method.

ADDITIONAL INFORMATION

Related Product Information for anti-ZP2 antibody	Description: Rabbit IgG polyclonal antibody for Zona pellucida sperm-binding protein 2(ZP2) detection. Tested with WB, IHC-P in Human. Background: Zona pellucida sperm-binding protein 2 is a protein that in humans is encoded by the ZP2 gene. The sperm-binding domain on the ZP2 protein is necessary in both humans and mice for oocyte-sperm recognition and penetration of the zona pellucida. It is also responsible for the primary block to polyspermy in mammals. The oocyte has cortical granules peripherally located under the cortex that contain a proteolytic protein called ovastacin. After the sperm binds to ZP2, the cortical granules are exocytosed releasing ovastacin into the perivitelline space. Ovastacin cleaves ZP2 at the N terminus, preventing more sperm from binding and penetrating the oocyte, thus hardening the zona pellucida. Ovastacin is only found in oocytes, and is part of the astacin family of metalloendoproteases. Female mice engineered without ovastacin showed that ZP2 was not cleaved after fertilization.
References	1. "Entrez Gene: ZP2 zona pellucida glycoprotein 2 (sperm receptor)". 2. Burkart AD, Xiong B, Baibakov B, Jiménez-Movilla M, Dean J. "Ovastacin, a cortical granule protease, cleaves ZP2 in the zona pellucida to prevent polyspermy.". J Cell Biol 197: 37-44. 3. Liang LF, Dean J (Apr 1993). "Conservation of mammalian secondary sperm receptor genes enables the promoter of the human gene to function in mouse oocytes". Dev Biol 156 (2): 399-408.

NCBI AND UNIPROT INFORMATION

NCBI GI #	588282802
NCBI GeneID	7783
NCBI Accession #	NP_001277033.1
NCBI GenBank Nucleotide #	NM_001290104.1
UniProt Accession #	Q05996; Q4VAN9; Q4VAP0; Q4VAP1; B2R7J2
Molecular Weight	81,300 Da
NCBI Official Full Name	zona pellucida sperm-binding protein 2 isoform 2 preproprotein
NCBI Official Synonym Full Names	zona pellucida glycoprotein 2
NCBI Official Symbol	ZP2
NCBI Official Synonym Symbols	ZPA; Zp-2
NCBI Protein Information	zona pellucida sperm-binding protein 2

UniProt Protein Name	Zona pellucida sperm-binding protein 2
UniProt Gene Name	ZP2
UniProt Synonym Gene Names	ZPA; Zp-2
UniProt Entry Name	ZP2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/zp2-antibody-immunohistochemistry-western-blot-elisa/46499>