

ARG59230 anti-ZP2 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes ZP2
Tested Reactivity	Hu
Predict Reactivity	Ms, Rat
Tested Application	IHC-Fr, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	ZP2
Species	Human
Immunogen	Synthetic peptide corresponding to aa. 511-544 of Human ZP2. (ENEYPLVRFLRQPIYMEVRVLNRDDPNIKLVLDD)
Conjugation	Un-conjugated
Alternate Names	ZPA; Zona pellucida glycoprotein 2; Zp-2; Zona pellucida sperm-binding protein 2; Zona pellucida protein A

Application Instructions

Application table	Application	Dilution
	IHC-Fr	0.5 - 1 µg/ml
	IHC-P	0.5 - 1 µg/ml
	WB	0.1 - 0.5 µg/ml
Application Note	IHC-P: Antigen Retrieval: By heat mediation. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.9% NaCl, 0.2% Na ₂ HPO ₄ , 0.05% Sodium azide and 5% BSA.
Preservative	0.05% Sodium azide
Stabilizer	5% BSA
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated

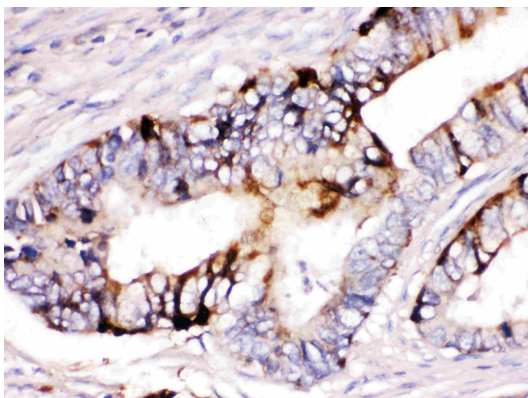
freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

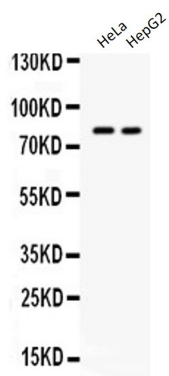
Gene Symbol	ZP2
Gene Full Name	zona pellucida glycoprotein 2 (sperm receptor)
Background	The zona pellucida is an extracellular matrix that surrounds the oocyte and early embryo. It is composed of three glycoproteins with various functions during fertilization and preimplantation development. The glycosylated mature peptide is one of the structural components of the zona pellucida and functions in secondary binding and penetration of acrosome-reacted spermatozoa. Female mice lacking this gene do not form a stable zona matrix and are sterile. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Feb 2014]
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. ZP2 may act as a secondary sperm receptor. [UniProt]
Calculated Mw	82 kDa
PTM	<p>Proteolytically cleaved before the transmembrane segment to yield the secreted ectodomain incorporated in the zona pellucida.</p> <p>Proteolytically cleaved in the N-terminal part by the metalloendopeptidase ASTL exocytosed from cortical granules after fertilization, yielding a N-terminal peptide of about 30 kDa which remains covalently attached to the C-terminal peptide via disulfide bond(s). This cleavage may play an important role in the post-fertilization block to polyspermy. Additional proteolytically cleavage of the N-terminal peptide of 30 kDa occurs in one-cell and two-cell embryos.</p> <p>N-glycosylated.</p> <p>O-glycosylated; contains sulfate-substituted glycans. [UniProt]</p>
Cellular Localization	Processed zona pellucida sperm-binding protein 2: Secreted, extracellular space, extracellular matrix. Note=The glycoproteinaceous translucent extracellular matrix that surrounds the mammalian oocyte is called zona pellucida. Cell membrane; Single-pass type I membrane protein. [UniProt]

Images



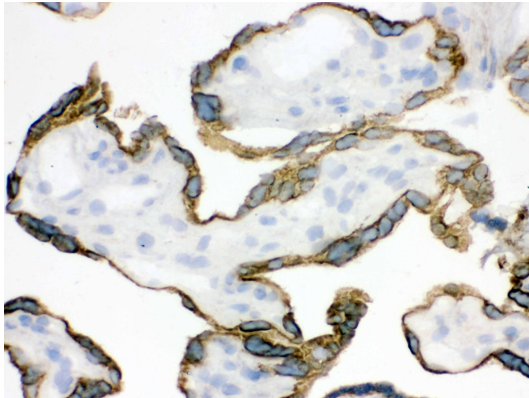
ARG59230 anti-ZP2 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human intestinal cancer stained with ARG59230 anti-ZP2 antibody at 1 µg/ml dilution.



ARG59230 anti-ZP2 antibody WB image

Western blot: HeLa and HepG2 whole cell lysates stained with ARG59230 anti-ZP2 antibody at 0.5 $\mu\text{g/ml}$ dilution.



ARG59230 anti-ZP2 antibody IHC-Fr image

Immunohistochemistry: Frozen section of Human placenta tissue. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG59230 anti-ZP2 antibody at 1 $\mu\text{g/ml}$, overnight at 4°C.