

ZP4 (L-15): sc-49588



The Power to Question

BACKGROUND

The mammalian zona pellucida is composed of four major glycoproteins, ZP1, ZP2, ZP3 and ZP4, which may act as sperm receptors. Two forms of porcine ZP4 peptides exist: one consisting of 128 amino acid residues and the other of 133 amino acid residues. These two peptides are identical, except the larger form contains an additional five amino acid sequence at its carboxy-terminal end. Both peptides have two potential N-linked glycosylation sites. The smaller peptide shares 39.1% identity with the amino-terminal region of mouse ZP2 polypeptide. Based on results from animal studies, ZP4 antigen is a promising candidate for the development of a contraceptive vaccine.

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CHROMOSOMAL LOCATION

Genetic locus: ZP4 (human) mapping to 1q43; Zp4 (mouse) mapping to 13.

SOURCE

ZP4 (L-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ZP4 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-49588 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ZP4 (L-15) is recommended for detection of ZP4 (zona pellucida sperm-binding protein 4 precursor) of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ZP4 siRNA (h): sc-61832, ZP4 siRNA (m): sc-155979, ZP4 shRNA Plasmid (h): sc-61832-SH, ZP4 shRNA Plasmid (m): sc-155979-SH, ZP4 shRNA (h) Lentiviral Particles: sc-61832-V and ZP4 shRNA (m) Lentiviral Particles: sc-155979-V.

Molecular weight of ZP4: 59 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.