

ZBPB2 (G-14): sc-165972

BACKGROUND

Mammalian gametes recognize each other when the plasma membrane of the sperm head binds to the zona pellucida (ZP), an extracellular coat surrounding eggs. The zona pellucida is composed of four major glycoproteins expressed in oocytes, ZP1, ZP2, ZP3 and ZP4. Important receptors of zona pellucida on sperm are the zona pellucida binding proteins (ZPBPs). ZPBPs are suggested to play an essential role in sperm-egg interaction. ZBPB2 (zona pellucida binding protein 2), also known as ZPBPL, is a 338 amino acid secreted protein that belongs to the zona pellucida-binding protein Sp38 family. Mutations in the gene encoding ZBPB2 may cause subfertility. ZBPB2 exists as two alternatively spliced isoforms and is encoded by a gene located on human chromosome 17q12.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ZBPB2 (human) mapping to 17q12; Zpbp2 (mouse) mapping to 11 D.

SOURCE

ZBPB2 (G-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of ZBPB2 of human origin.

RESEARCH USE

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

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-165972 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

ZBPB2 (G-14) is recommended for detection of ZBPB2 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); non cross-reactive with ZBPB1.

ZBPB2 (G-14) is also recommended for detection of ZBPB2 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for ZBPB2 siRNA (h): sc-93858, ZBPB2 siRNA (m): sc-155827, ZBPB2 shRNA Plasmid (h): sc-93858-SH, ZBPB2 shRNA Plasmid (m): sc-155827-SH, ZBPB2 shRNA (h) Lentiviral Particles: sc-93858-V and ZBPB2 shRNA (m) Lentiviral Particles: sc-155827-V.

Molecular Weight of ZBPB2: 35 kDa.

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.

PROTOCOLS

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