

Oviductin (P-20): sc-46433

BACKGROUND

The mucins are a family of highly glycosylated, secreted proteins with a basic structure consisting of a variable number of tandem repeats (VNTRs). The number of repeats is highly polymorphic and varies among different alleles. The mucin family consists of Mucins 1-4, Mucin 5 (AC and B), Mucins 6-8, Mucins 11-13 and Mucins 15-17. Mucin 9 (Muc9), often referred to as oviduct-specific glycoprotein (Oviductin) or estrogen-dependent oviduct protein, is an oviduct-specific protein. It binds to oocyte zona pellucida *in vivo* and is involved in the fertilization process and early embryonic development. Oviductin localizes to secretory granules and the protein is detected in OE-E6/E7 cell lines. During the human reproductive cycle, Oviductin expression is highest at the time of ovulation.

REFERENCES

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3. Briton-Jones, C., et al. 2001. Regulation of human Oviductin mRNA expression *in vivo*. *Fertil. Steril.* 75: 942-946
4. Lok, I.H., et al. 2002. Variable expression of Oviductin mRNA at different stages of human reproductive cycle. *J. Assist. Reprod. Genet.* 19: 569-576.
5. Briton-Jones, C., et al. 2002. Human Oviductin mRNA expression is not maintained in oviduct mucosal cell culture. *Fertil. Steril.* 77: 576-580.
6. Hiyoshi, M., et al. 2002. Oviductin, the oviductal protease that mediates gamete interaction by affecting the vitelline coat in *Bufo japonicus*: its molecular cloning and analyses of expression and posttranslational activation. *Dev. Biol.* 243: 176-184.

CHROMOSOMAL LOCATION

Genetic locus: OVGP1 (human) mapping to 1p13.

SOURCE

Oviductin (P-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Oviductin (also designated Mucin 9) 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-46433 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

Oviductin (P-20) is recommended for detection of Oviductin of human and hamster origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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 Oviductin siRNA (h): sc-45354, Oviductin shRNA Plasmid (h): sc-45354-SH and Oviductin shRNA (h) Lentiviral Particles: sc-45354-V.

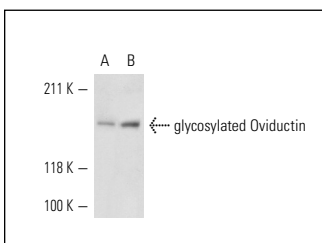
Molecular Weight of Oviductin: 120 kDa.

Positive Controls: CHO whole cell lysate, CHO-K1 cell lysate: sc-3809 or 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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



Oviductin (P-20): sc-46433. Western blot analysis of glycosylated Oviductin expression in CHO (A) and CHO-K1 (B) whole cell lysates.

RESEARCH USE

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

MONOS
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Try **Oviductin (H-8): sc-377267** or **Oviductin (G-7): sc-376300**, our highly recommended monoclonal alternatives to Oviductin (P-20).