

# Oviductin (K-17): sc-46429

## 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

1. Arias, E.B., et al. 1994. Complementary deoxyribonucleic acid cloning and molecular characterization of an estrogen-dependent human oviductal glycoprotein. *Biol. Reprod.* 51: 685-694.
2. Hendrix, E., et al. 2001. Oviductin (Muc9) is expressed in rabbit endocervix. *Endocrinology* 142: 2151.
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.
7. Briton-Jones, C., et al. 2004. Estradiol regulation of Oviductin/oviduct-specific glycoprotein messenger ribonucleic acid expression in human oviduct mucosal cells *in vitro*. *Fertil. Steril.* 81: 749-756.
8. Ling, L., et al. 2005. Expression of human Oviductin in an immortalized human oviductal cell line. *Fertil. Steril.* 84: 1095-1103.

## CHROMOSOMAL LOCATION

Genetic locus: OVG1 (human) mapping to 1p13; Ovgp1 (mouse) mapping to 3 F3.

## SOURCE

Oviductin (K-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Oviductin (also designated Mucin 9) of mouse origin.

## STORAGE

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

## 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-46429 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Oviductin (K-17) is recommended for detection of Oviductin of mouse 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 Oviductin siRNA (m): sc-45355, Oviductin shRNA Plasmid (m): sc-45355-SH and Oviductin shRNA (m) Lentiviral Particles: sc-45355-V.

Molecular Weight of Oviductin: 120 kDa.

Positive Controls: CHO-K1 cell lysate: sc-3809.

## 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.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.


 MONOS  
Satisfaction  
Guaranteed

Try **Oviductin (H-8): sc-377267**, our highly recommended monoclonal alternative to Oviductin (K-17).