SANTA CRUZ BIOTECHNOLOGY, INC.

# Oviductin (H-8): sc-377267

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## 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.

## CHROMOSOMAL LOCATION

Genetic locus: OVGP1 (human) mapping to 1p13.2; Ovgp1 (mouse) mapping to 3 F2.2.

## SOURCE

Oviductin (H-8) is a mouse monoclonal antibody raised against amino acids 632-721 mapping at the C-terminus of Oviductin (also designated Mucin 9) of mouse origin.

## PRODUCT

Each vial contains 200 µg $IgG_1$ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Oviductin (H-8) is available conjugated to agarose (sc-377267 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-377267 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-377267 PE), fluorescein (sc-377267 FITC), Alexa Fluor® 488 (sc-377267 AF488), Alexa Fluor® 546 (sc-377267 AF546), Alexa Fluor® 594 (sc-377267 AF594) or Alexa Fluor® 647 (sc-377267 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-377267 AF680) or Alexa Fluor® 790 (sc-377267 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

## APPLICATIONS

Oviductin (H-8) is recommended for detection of Oviductin of mouse, rat, human and hamster origin by Western Blotting (starting dilution 1:100, 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), immunohistochemistry (including paraffin-embedded sections) (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 siRNA (m): sc-45355, Oviductin shRNA Plasmid (h): sc-45354-SH, Oviductin shRNA Plasmid (m): sc-45355-SH, Oviductin shRNA (h) Lentiviral Particles: sc-45354-V and Oviductin shRNA (m) Lentiviral Particles: sc-45355-V.

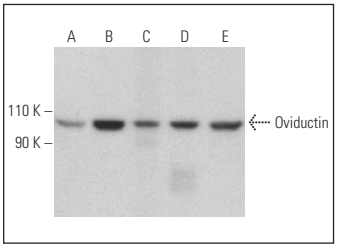
Molecular Weight of Oviductin: 120 kDa.

Positive Controls: c4 whole cell lysate: sc-364186, mouse ovary extract: sc-2404 or mouse liver extract: sc-2256.

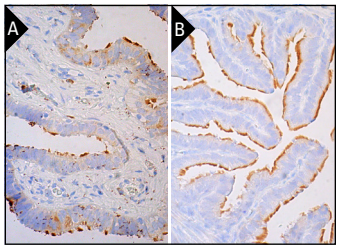
## STORAGE

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

## DATA




Oviductin (H-8): sc-377267. Western blot analysis of Oviductin expression in ES-2 (**A**) and c4 (**B**) whole cell lysates and mouse liver (**C**), mouse ovary (**D**) and rat uterus (**E**) tissue extracts. Detection reagent used: m-IgGκ BP-HRP: sc-516102.




Oviductin (H-8): sc-377267. Immunoperoxidase staining of formalin fixed, paraffin-embedded human fallopian tube (**A**) and mouse fallopian tube (**B**) tissue showing apical membrane staining of glandular cells. Blocked with 0.25X UltraCruz® Blocking Reagent: sc-516214. Detection reagents used: m-IgGκ BP-B: sc-516142 and ImmunoCruz® ABC Kit: sc-516216.

## SELECT PRODUCT CITATIONS


1. Saint-Dizier, M., et al. 2014. OVGP1 is expressed in the canine oviduct at the time and place of oocyte maturation and fertilization. Mol. Reprod. Dev. 81: 972-982.
2. Ferraz, M.A.M.M., et al. 2018. An oviduct-on-a-chip provides an enhanced *in vitro* environment for zygote genome reprogramming. Nat. Commun. 9: 4934.
3. Banliat, C., et al. 2020. Identification of 56 proteins involved in embryo-maternal interactions in the bovine oviduct. Int. J. Mol. Sci. 21: 466.
4. Alcântara-Neto, A.S., et al. 2020. Oviduct fluid extracellular vesicles regulate polyspermy during porcine *in vitro* fertilisation. Reprod. Fertil. Dev. 32: 409-418.
5. Bragança, G.M., et al. 2021. Oviduct fluid during IVF moderately modulates polyspermy in *in vitro*-produced goat embryos during the non-breeding season. Theriogenology 168: 59-65.
6. Tan, X., et al. 2021. Lgr4 regulates oviductal epithelial secretion through the WNT signaling pathway. Front. Cell Dev. Biol. 9: 666303.
7. Zhao, X., et al. 2023. Colnoy-stimulating factor 1 positive ($CSF1^+$) secretory epithelial cells induce excessive trophoblast invasion in tubal pregnancy rupture. Cell Prolif. 56: e13408.


## RESEARCH USE

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

## PROTOCOLS

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