

# Odf1 (G-17): sc-27907

## BACKGROUND

The major cytoskeletal structures in the mammalian sperm tail are the outer dense fibers (ODF) and the fibrous sheath (FS). The ODFs are located on the outside of the axoneme, and they help maintain the passive elastic structures and elastic recoil of the sperm tail. Human ODFs consist of approximately 10 major and at least 15 minor proteins. The major proteins of the ODF include Odf1, Odf2, and Odf3, which compose a family of proteins that are preferentially expressed during mammalian spermiogenesis. The human Odf1 gene maps to chromosome 8q22.3. The human Odf2 gene maps to chromosome 9q34. Both Odf1 and Odf2 are exclusively expressed in testis. Odf2 interacts with Odf1 during assembly of the outer dense fibers by means of leucine zippers in both proteins. Odf1 can also self interact. The Odf proteins may be involved in male infertility as a result of flagellar dysfunction.

## CHROMOSOMAL LOCATION

Genetic locus: ODF1 (human) mapping to 8q22.3; Odf1 (mouse) mapping to 15 B3.1.

## SOURCE

Odf1 (G-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Odf1 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-27907 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

Odf1 (G-17) is recommended for detection of Odf1 of mouse, rat and human 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), 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).

Odf1 (G-17) is also recommended for detection of Odf1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Odf1 siRNA (h): sc-106886, Odf1 siRNA (m): sc-150176, Odf1 shRNA Plasmid (h): sc-106886-SH, Odf1 shRNA Plasmid (m): sc-150176-SH, Odf1 shRNA (h) Lentiviral Particles: sc-106886-V and Odf1 shRNA (m) Lentiviral Particles: sc-150176-V.

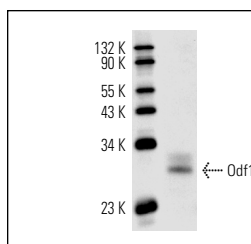
Molecular Weight of Odf1: 27 kDa.

Positive Controls: rat testis extract: sc-2400.

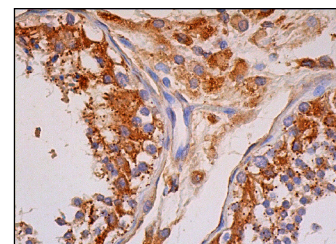
## RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



Odf1 (G-17): sc-27907. Western blot analysis of Odf1 expression in rat testis tissue extract.



Odf1 (G-17): sc-27907. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing cytoplasmic staining of cells in seminiferous ducts and Leydig cells.

## 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.

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Satisfaction  
Guaranteed

Try **Odf1 (E-11): sc-390152**, our highly recommended monoclonal alternative to Odf1 (G-17).