

# ODF2 Antibody (internal region)

Peptide-affinity purified goat antibody Catalog # AF3425a

## Specification

## **ODF2** Antibody (internal region) - Product Information

Application Primary Accession Other Accession

Reactivity Predicted Host Clonality Concentration Isotype Calculated MW WB <u>Q5BJF6</u> <u>NP\_002531.3</u>, <u>NP\_702915.1</u>, <u>4957</u>, <u>18286</u> (mouse), <u>29479 (rat)</u> Mouse Human, Rat, Pig, Dog Goat Polyclonal 0.5 mg/ml IgG 95401

# **ODF2** Antibody (internal region) - Additional Information

Gene ID 4957

**Other Names** Outer dense fiber protein 2, Cenexin, Outer dense fiber of sperm tails protein 2, ODF2

## Format

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** ODF2 Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

## **ODF2** Antibody (internal region) - Protein Information

Name ODF2

#### Function

Seems to be a major component of sperm tail outer dense fibers (ODF). ODFs are filamentous structures located on the outside of the axoneme in the midpiece and principal piece of the mammalian sperm tail and may help to maintain the passive elastic structures and elastic recoil of the sperm tail. May have a modulating influence on sperm motility. Functions as a general scaffold protein that is specifically localized at the distal/subdistal appendages of mother centrioles. Component of the centrosome matrix required for the localization of PLK1 and NIN to the



centrosomes. Required for the formation and/or maintenance of normal CETN1 assembly.

### **Cellular Location**

Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cell projection, cilium {ECO:000250|UniProtKB:A3KGV1}. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole Cytoplasm, cytoskeleton, spindle pole {ECO:0000250|UniProtKB:A3KGV1} Cell projection, cilium, flagellum {ECO:0000250|UniProtKB:A3KGV1} Note=Localized at the microtubule organizing centers in interphase and spindle poles in mitosis. Localized at the distal/subdistal appendages of mother centrioles. {ECO:0000250|UniProtKB:A3KGV1}

#### **Tissue Location**

Testis-specific (at protein level). Highly expressed in cytoplasm of step 2 round spermatids. Detected in the middle piece and extends to about half the principal piece of the sperm tails.

## **ODF2 Antibody (internal region) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

ODF2 Antibody (internal region) - Images

250kDa 150kDa 100kDa 75kDa
50kDa
37kDa
25kDa

AF3425a (3  $\mu$ g/ml) staining of C57/B6 mouse CTL lysate (35  $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence. Data provided by Everest grant winner Dr. J. Griffiths, University of Cambridge, UK

## **ODF2** Antibody (internal region) - Background

This antibody is expected to recognize reported isoform 1 (NP\_002531.3).



# **ODF2 Antibody (internal region) - References**

Plk1-dependent and -independent roles of an ODF2 splice variant, hCenexin1, at the centrosome of somatic cells. Soung NK, Park JE, Yu LR, Lee KH, Lee JM, Bang JK, Veenstra TD, Rhee K, Lee KS, Developmental cell 2009 Apr 16 (4): 539-50. PMID: 19386263