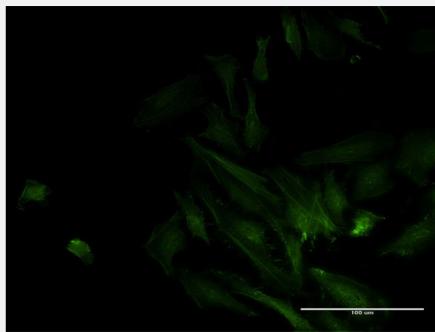


# ODF2 monoclonal antibody (M01), clone 1A1

Catalog # H00004957-M01

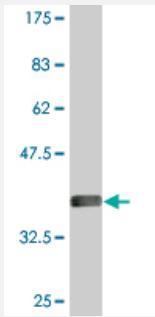
Size 100 ug

## Applications



### Immunofluorescence

Immunofluorescence of monoclonal antibody to ODF2 on HeLa cell . [antibody concentration 10 ug/ml]



Western Blot detection against Immunogen (36.63 KDa) .

## Specification

<b>Product Description</b>	Mouse monoclonal antibody raised against a partial recombinant ODF2.
<b>Immunogen</b>	ODF2 (NP_002531.3, 706 a.a. ~ 804 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
<b>Sequence</b>	KEHALSKERAQNKILDLETQLSRTKTELSQLRRSDDADRRYQSRLQDLKDRLEQSESTNRSM QNYVQFLKSSYANVFGDPYSTFLTSSPIRSRSPP
<b>Host</b>	Mouse
<b>Reactivity</b>	Human

<b>Interspecies Antigen Sequence</b>	Mouse (91)
<b>Isotype</b>	IgG2a Kappa
<b>Quality Control Testing</b>	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.63 KDa) .
<b>Storage Buffer</b>	In 1x PBS, pH 7.4
<b>Storage Instruction</b>	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

## Applications

- Western Blot (Recombinant protein)

[Protocol Download](#)

- ELISA

- Immunofluorescence

Immunofluorescence of monoclonal antibody to ODF2 on HeLa cell . [antibody concentration 10 ug/ml]

## Gene Info — ODF2

<b>Entrez GenelD</b>	<a href="#">4957</a>
<b>GeneBank Accession#</b>	<a href="#">NM_002540</a>
<b>Protein Accession#</b>	<a href="#">NP_002531.3</a>
<b>Gene Name</b>	ODF2
<b>Gene Alias</b>	FLJ44866, MGC111096, MGC9034, ODF2/1, ODF2/2, ODF84
<b>Gene Description</b>	outer dense fiber of sperm tails 2
<b>Omim ID</b>	<a href="#">602015</a>
<b>Gene Ontology</b>	<a href="#">Hyperlink</a>

**Gene Summary**

The outer dense fibers are cytoskeletal structures that surround the axoneme in the middle piece and principal piece of the sperm tail. The fibers function in maintaining the elastic structure and recoil of the sperm tail as well as in protecting the tail from shear forces during epididymal transport and ejaculation. Defects in the outer dense fibers lead to abnormal sperm morphology and infertility. This gene encodes one of the major outer dense fiber proteins. Multiple protein isoforms are encoded by transcript variants of this gene; however, not all isoforms and variants have been fully described. [provided by RefSeq]

**Other Designations**

OTTHUOMP0000022273|OTTHUOMP0000022274|cenexin 1|outer dense fiber of sperm tails, 84-kD|outer dense fibre of sperm tails 2|sperm tail structural protein

**Publication Reference**

- [Dual-color live imaging unveils stepwise organization of multiple basal body arrays by cytoskeletons.](#)

Gen Shiratsuchi, Satoshi Konishi, Tomoki Yano, Yuichi Yanagihashi, Shogo Nakayama, Tatsuya Katsuno, Hiroka Kashihara, Hiroo Tanaka, Kazuto Tsukita, Koya Suzuki, Elisa Herawati, Hitomi Watanabe, Toyohiro Hirai, Takeshi Yagi, Gen Kondoh, Shimpei Gotoh, Atsushi Tamura, Sachiko Tsukita.

EMBO reports 2024 Mar; 25(3):1176.

Application: IF, Mouse, Mouse trachea

- [FBF1 deficiency promotes beigeing and healthy expansion of white adipose tissue.](#)

Yingyi Zhang, Jielu Hao, Mariana G Tarrago, Gina M Warner, Nino Giorgadze, Qing Wei, Yan Huang, Kai He, Chuan Chen, Thais R Peclat, Thomas A White, Kun Ling, Tamar Tchkonia, James L Kirkland, Eduardo N Chini, Jinghua Hu.

Cell Reports 2021 Aug; 36(5):109481.

Application: IF, Mouse, Mouse Embryonic Fibroblasts

- [FAM46C/TENT5C functions as a tumor suppressor through inhibition of Plk4 activity.](#)

Karineh Kazazian, Yosr Haffani, Deanna Ng, Chae Min Michelle Lee, Wendy Johnston, Minji Kim, Roland Xu, Karina Pacholzyk, Francis Si-Wah Zih, Julie Tan, Alannah Smrke, Aaron Pollett, Hannah Sun-Tsi Wu, Carol Jane Swallow.

Communications Biology 2020 Aug; 3(1):448.

Application: IF, Human, U-2 OS cells

- [TALPID3 and ANKRD26 selectively orchestrate FBF1 localization and cilia gating.](#)

Hao Yan, Chuan Chen, Huicheng Chen, Hui Hong, Yan Huang, Kun Ling, Jinghua Hu, Qing Wei.

Nature Communications 2020 May; 11(1):2196.

Application: IF, Human, Cilia

- [Posterior Neocortex-Specific Regulation of Neuronal Migration by CEP85L Identifies Maternal Centriole-Dependent Activation of CDK5.](#)

Kodani A, Kenny C, Lai A, Gonzalez DM, Stronge E, Sejourne GM, Isacco L, Partlow JN, O'Donnell A, McWalter K, Byrne AB, Barkovich AJ, Yang E, Hill RS, Gawlinski P, Wiszniewski W, Cohen JS, Fatemi SA, Baranano KW, Sahin M, Vossler DG, Yuskaitis CJ, Walsh CA.

Neuron 2020 Apr; 106(2):246.

Application: IF, Human, U-2 OS cells

- [ESCRT subunit CHMP4B localizes to primary cilia and is required for the structural integrity of the ciliary membrane.](#)

Eunji Jung, Tae-Ik Choi, Ji-Eun Lee, Cheol-Hee Kim, Joon Kim.

FASEB Journal 2020 Jan; 34(1):1331.

Application: IF, Human, RPE1 cells

- [Quantitative analysis of sensitivity to a Wnt3a gradient in determination of the pole-to-pole axis of mitotic cells by using a microfluidic device.](#)

Hiraiwa T, Nakai Y, Yamada TG, Tanimoto R, Kimura H, Matsumoto Y, Miki N, Hiroi N, Funahashi A.

FEBS Open Bio 2018 Nov; 8(12):1920.

Application: IF, Human, SH-SY5Y cells

- [Phosphatidylinositol phosphate kinase PIPK \$\gamma\$  and phosphatase INPP5E coordinate initiation of ciliogenesis.](#)

Xu Q, Zhang Y, Wei Q, Huang Y, Hu J, Ling K.

Nature Communications 2016 Feb; 7:10777.

Application: IF, Human, RPE-1, RCTE cells

- [Mutations in KIAA0586 Cause Lethal Ciliopathies Ranging from a Hydrolethalus Phenotype to Short-Rib Polydactyly Syndrome.](#)

Caroline Alby, Kevin Piquand, Céline Huber, André Megarbané, Amale Ichkou, Marine Legendre, Fanny Pelluard, Ferechté Encha-Ravazi, Georges Abi-Tayeh, Bettina Bessières, Salima El Chehadeh-Djebar, Nicole Laurent, Laurence Faivre, László Sztriha, Melinda Zombor, Hajnalka Szabó, Marion Failler, Meriem Garfa-Traore, Christine Bole, Patrick Nitschké, Mathilde Nizon, Nadia Elkhartoufi, Françoise Clerget-Darpoux, Arnold Munnich, Stanislas Lyonnet, Michel Vekemans, Sophie Saunier, Valérie Cormier-Da

American Journal of Human Genetics 2015 Aug; 97(2):311.

Application: IF, Human, Human cilia cells

- [Type I phosphatidylinositol phosphate kinase targets to the centrosome and restrains centriole duplication.](#)

Xu Q, Zhang Y, Xiong X, Huang Y, Salisbury JL, Hu J, Ling K.

Journal of Cell Science 2014 Mar; 127(Pt 6):1293.

Application: IF, Human, HeLa cells

## Disease

- [Tobacco Use Disorder](#)