Product Datasheet

ODF2 Antibody (1A1) - Azide and BSA Free H00004957-M01

Unit Size: 0.1 mg

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

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H00004957-M01

ODF2 Antibody (1A1) - Azide and BSA Free

Product Information	
Unit Size	0.1 mg
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	1A1
Preservative	No Preservative
Isotype	IgG2a Kappa
Purity	IgG purified
Buffer	In 1x PBS, pH 7.4
Product Description	
Description	Quality control test: Antibody Reactive Against Recombinant Protein.
Host	Mouse
Gene ID	4957
Gene Symbol	ODF2
Species	Human, C. elegans
Reactivity Notes	C. elegans reactivity reported in scientific literature (PMID: 24231678).
Specificity/Sensitivity	ODF2 - outer dense fiber of sperm tails 2 (1A1)
Immunogen	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. KEHALSKERAAQNKILDLETQLSRTKTELSQLRRSRDDADRRYQSRLQDLKDR LEQSESTNRSMQNYVQFLKSSYANVFGDGPYSTFLTSSPIRSRSPP
Notes	This product is produced by and distributed for Abnova, a company based in Taiwan.
Product Application Details	
Applications	Western Blot, ELISA, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry
Recommended Dilutions	Western Blot 1:500, ELISA, Immunohistochemistry 1:10-1:500, Immunocytochemistry/ Immunofluorescence 1:10-1:500
Application Notes	Antibody reactivity against Recombinant Protein with GST tag on ELISA and WB. GST tag alone is used as a negative control. ICC/IF usage reported in scientific literature. IHC usage reported in scientific literature (PMID: 24231678).

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Immunocytochemistry/ Immunofluorescence: ODF2 Antibody (1A1) [H00004957-M01] - The localization & function of DYF-19 are highly conservedEither endogenous (a) or overexpressed (b) FBF1, the mammalian homolog of worm DYF-19, localizes specifically on one centriole with a ring-like pattern in IMCD3 cells. c, FBF1 localizes at the ciliary base, above the basal body. d, In IMCD3 cells, FBF1 localizes above rootlet & subdistal appendage protein ODF2 & completely colocalizes with distal appendage protein CEP164. e, Immuno-EM demonstrates that FBF1 localizes specifically to distal appendages of mother centrioles. f-h, Knock-down of FBF1 leads to severely truncated cilia in most RNAi-treated hTERT-RPE cells. Data are represented as mean of 3 independent experiments (n=200) & error bars indicate s.d. Significant differences were identified by the Student's t-test. *P<0.001. i & j, The IFT-B component IFT88, but not the IFT-A component IFT140, enters the truncated cilia of FBF1-knockdown hTERT-RPE cells. Arrows indicate the tips of truncated cilia. k, Endogenous IFT54 immunoprecipitates with FBF1 in hTERT-RPE cells. I, HEK293 cells were transiently transfected with FLAG-HA-tagged FBF1, & 48 hours later, cells were subjected to immunoprecipitation using normal mouse IgG (mIgG) or anti-IFT54 antibody. 50 µg protein were loaded into each lane. Bars: c, 1µm; e, 200 nm; others, 20 µm. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/24231678), licensed under a CC-BY

license. Not internally tested by Novus Biologicals.

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Publications

Mazo G, Soplop N, Wang WJ et al. Spatial Control of Primary Ciliogenesis by Subdistal Appendages Alters Sensation-Associated Properties of Cilia Developmental Cell 2016-11-01 [PMID: 27818179]

Ching K, Wang JT, Stearns T Long-range migration of centrioles to the apical surface of the olfactory epithelium eLife 2022-04-14 [PMID: 35420544] (ICC/IF, Mouse)

Kodani A, Kenny C, Lai A et al. Posterior Neocortex-Specific Regulation of Neuronal Migration by CEP85L Identifies Maternal Centriole-Dependent Activation of CDK5. Neuron. 2020-02-13 [PMID: 32097629]

Yingyi Z, Jielu H, Mariana T et al. FBF1 deficiency promotes beiging and healthy expansion of white adipose tissue. Cell Rep. 2021-08-03 [PMID: 34348145]

H Yan, C Chen, H Chen, H Hong, Y Huang, K Ling, J Hu, Q Wei TALPID3 and ANKRD26 selectively orchestrate FBF1 localization and cilia gating Nat Commun, 2020-05-04;11(1):2196. 2020-05-04 [PMID: 32366837]

Eunji J, Tae-Ik C, Ji-Eun L et al. ESCRT subunit CHMP4B localizes to primary cilia and is required for the structural integrity of the ciliary membrane. FASEB J. 2019-11-29 [PMID: 31914703]

Hiraiwa T, Nakai Y, Yamada T et al. Quantitative analysis of sensitivity to a Wnt3a gradient in determination of the pole-to-pole axis of mitotic cells by using a microfluidic device. FEBS Open Bio 2018-09-16 [PMID: 30524943] (ICC/IF, Human)

Xu Q, Zhang Y, Wei Q et al. Phosphatidylinositol phosphate kinase PIPKIgamma and phosphatase INPP5E coordinate initiation of ciliogenesis. Nat Commun 2016-02-26 [PMID: 26916822] (WB)

Alby C, Piquand K, Huber C et al. Mutations in KIAA0586 Cause Lethal Ciliopathies Ranging from a Hydrolethalus Phenotype to Short-Rib Polydactyly Syndrome. Am J Hum Genet 2015-08-06 [PMID: 26166481]

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Wei Q, Xu Q, Zhang Y et al. Transition fibre protein FBF1 is required for the ciliary entry of assembled intraflagellar transport complexes. Nat Commun. 2013-11-15 [PMID: 24231678] (IF/IHC, ICC/IF, C. elegans)

More publications at http://www.novusbio.com/H00004957-M01





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NBP1-96981-0.5mg	Mouse IgG2a Kappa Isotype Control (M2AK)
NBP1-85417PEP	ODF2 Recombinant Protein Antigen

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