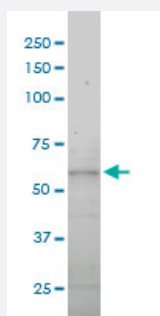


DNAI2 monoclonal antibody (M01), clone 1C8

Catalog # H00064446-M01

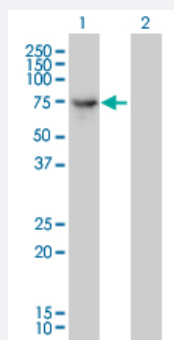
Size 100 ug

Applications



Western Blot (Cell lysate)

DNAI2 monoclonal antibody (M01), clone 1C8 Western Blot analysis of DNAI2 expression in A-431 (Cat # L015V1).

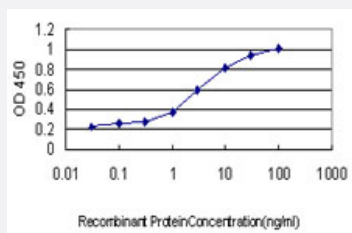


Western Blot (Transfected lysate)

Western Blot analysis of DNAI2 expression in transfected 293T cell line by DNAI2 monoclonal antibody (M01), clone 1C8.

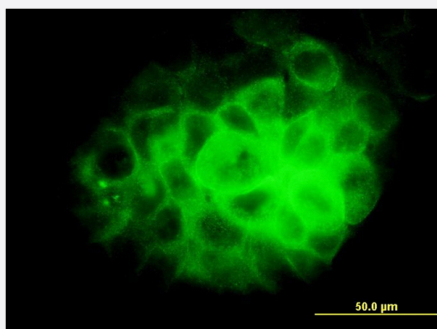
Lane 1: DNAI2 transfected lysate(67 KDa).

Lane 2: Non-transfected lysate.



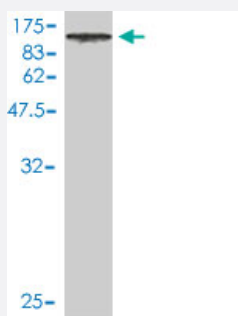
Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged DNAI2 is approximately 0.03ng/ml as a capture antibody.



Immunofluorescence

Immunofluorescence of monoclonal antibody to DNAI2 on A-431 cell. [antibody concentration 10 ug/ml]



Western Blot detection against Immunogen (90.97 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a full length recombinant DNAI2.
Immunogen	DNAI2 (AAH39582, 1 a.a. ~ 593 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	MEIVYVYVKKRSEFGKQC�NFSDRQAEINIDIMPNPELAEQFVERNPVDTGIQCSISMSEHEANSER FEMETRGVNHVEGGWPKDVNPLELEQTIRFRKKVEKDENVYNAIMQLGSIMEHCİKQNNADIYEEY FNDEEAMEVMEEDPSAKTINVFRDPQEIKRAATHLSWHPDGNRKLAVAYSCLDFQRAPVGMSS DSYWDLENPNKPELALKPSSPLVTLEFNPKDSHVLLGGCYNGQIACWDTRKGS�VAELSTIESSH RDPVYGTWLQSKTGTECFSASTDGQVMWWDIRKMSEPTEVVILDITKKEQLENALGAISLEFEST LPTKFMVGTEQGMVISCNRKAKTSAEKIVCTFPGHHGPIYALQRNPFYPKNFLTVGDWTARIWSEDS RESSIMWTKYHMAYLTDAAWSPVRPTVFFTTRMDGTLDWDFMFEQCDPTLSLKDNGLIACGS QLGTTTLLEVSPGLSTLQRNEKNVASSMFERETRREKILEARHREMRLKEKGKAEGRDEEQTDE ELAVDLEALVSKAEFFDIIFTELKKKEADAİKLTPVPQQPSPEEDQVVEEGEEAAGEEGDEEV EEDLA
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Mouse (84); Rat (82)
Isotype	IgG2a kappa

Quality Control Testing

Antibody Reactive Against Recombinant Protein.
Western Blot detection against Immunogen (90.97 KDa) .

Storage Buffer

In 1x PBS, pH 7.4

Storage Instruction

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Cell lysate)

DNAI2 monoclonal antibody (M01), clone 1C8 Western Blot analysis of DNAI2 expression in A-431 (Cat # L015V1).

[Protocol Download](#)

- Western Blot (Transfected lysate)

Western Blot analysis of DNAI2 expression in transfected 293T cell line by DNAI2 monoclonal antibody (M01), clone 1C8.

Lane 1: DNAI2 transfected lysate(67 KDa).

Lane 2: Non-transfected lysate.

[Protocol Download](#)

- Western Blot (Recombinant protein)

[Protocol Download](#)

- Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged DNAI2 is approximately 0.03ng/ml as a capture antibody.

[Protocol Download](#)

- ELISA

- Immunofluorescence

Immunofluorescence of monoclonal antibody to DNAI2 on A-431 cell. [antibody concentration 10 ug/ml]

Gene Info — DNAI2

Entrez GeneID

[64446](#)

GeneBank Accession#

[BC039582](#)

Protein Accession#

[AAH39582](#)

Gene Name	DNAI2
Gene Alias	CILD9
Gene Description	dynein, axonemal, intermediate chain 2
Omim ID	605483
Gene Ontology	Hyperlink
Gene Summary	axonemal
Other Designations	dynein intermediate chain 2 dynein, axonemal, intermediate polypeptide 2

Publication Reference

- [Identification of IQCH as a calmodulin-associated protein required for sperm motility in humans.](#)

Emma Cavarocchi, Camille Sayou, Patrick Lorès, Caroline Cazin, Laurence Stouvenel, Elma El Khouri, Charles Coutton, Zine-Eddine Kherraf, Catherine Patrat, Jérôme Govin, Nicolas Thierry-Mieg, Marjorie Whitfield, Pierre F Ray, Emmanuel Dulioust, Aminata Touré.

iScience 2023 Jul; 26(8):107354.

Application: PLA-Ce, Human, spermatozoa

- [LRRC6 regulates biogenesis of motile cilia by aiding FOXJ1 translocation into the nucleus.](#)

Dong Yun Kim, Yu Jin Sub, Hye-Youn Kim, Kyeong Jee Cho, Won Il Choi, Yo Jun Choi, Min Goo Lee, Friedhelm Hildebrandt, Heon Yung Gee.

Cell Communication and Signaling 2023 Jun; 21(1):142.

Application: IF, WB-Ti, Mouse, Mouse testis

- [CFAP53 regulates mammalian cilia-type motility patterns through differential localization and recruitment of axonemal dynein components.](#)

Takahiro Ide, Wang Kyaw Twan, Hao Lu, Yayoi Ikawa, Lin-Xenia Lim, Nicole Henninger, Hiromi Nishimura, Katsuyoshi Takaoka, Vijay Narasimhan, Xiumin Yan, Hidetaka Shiratori, Sudipto Roy, Hiroshi Hamada.

PLoS Genetics 2020 Dec; 16(12):e1009232.

Application: WB-Ti, Mouse, Axonemes from mouse tracheal cilia, Mouse tracheae

- [Nodal paralogues underlie distinct mechanisms for visceral left-right asymmetry in reptiles and mammals.](#)

Kajikawa E, Horo U, Ide T, Mizuno K, Minegishi K, Hara Y, Ikawa Y, Nishimura H, Uchikawa M, Kiyonari H, Kuraku S, Hamada H.

Nature Ecology & Evolution 2020 Feb; 4(2):261.

Application: IF, Gecko, Gecko embryos

- [CFAP70 mutations lead to male infertility due to severe astheno-teratozoospermia. A case report.](#)

Beurois J, Martinez G, Cazin C, Kherraf ZE, Amiri-Yekta A, Thierry-Mieg N, Bidart M, Petre G, Satre V, Brouillet S, Touré A, Arnoult C, Ray PF, Coutton C.

Human Reproduction 2019 Oct; 34(10):2071.

Application: IF, Human, Human sperm cells

- [Vertebrate Dynein-f depends on Wdr78 for axonemal localization and is essential for ciliary beat.](#)

Zhang Y, Chen Y, Zheng J, Wang J, Duan S, Zhang W, Yan X, Zhu X.

Journal of Molecular Cell Biology 2018 Jul; [Epub].

Application: WB-Ti, Mouse, Testis

- [ZMYND10 stabilizes intermediate chain proteins in the cytoplasmic pre-assembly of dynein arms.](#)

Cho KJ, Noh SH, Han SM, Choi WI, Kim HY, Yu S, Lee JS, Rim JH, Lee MG, Hildebrandt F, Gee HY.

PLoS Genetics 2018 Mar; 14(3):e1007316.

Application: IF, WB, Human, Mouse, HEK 293T cells, Testis, Tracheal epithelial cells

- [HEATR2 Plays a Conserved Role in Assembly of the Ciliary Motile Apparatus.](#)

Diggle CP, Moore DJ, Mali G, zur Lage P, Ait-Lounis A, Schmidts M, Shoemark A, Garcia Munoz A, Halachev MR, Gautier P, Yeyati PL, Bonthron DT, Carr IM, Hayward B, Markham AF, Hope JE, von Kriegsheim A, Mitchison HM, Jackson IJ, Durand B, Reith W, Sheridan E, Jarman AP, Mill P.

PLoS Genetics 2014 Sep; 10(9):e1004577.

Application: IF, WB-Ce, Human, Bronchial epithelial cells

- [Pih1d3 is required for cytoplasmic preassembly of axonemal dynein in mouse sperm.](#)

Dong F, Shinohara K, Botilde Y, Nabeshima R, Asai Y, Fukumoto A, Hasegawa T, Matsuo M, Takeda H, Shiratori H, Nakamura T, Hamada H.

The Journal of Cell Biology 2014 Jan; 204(2):203.

Application: IF, IP-WB, WB-Ce, WB-Ti, Mouse, Sperm, Testis

- [Mutations in DNAH1, which Encodes an Inner Arm Heavy Chain Dynein, Lead to Male Infertility from Multiple Morphological Abnormalities of the Sperm Flagella.](#)

Ben Khelifa M, Coutton C, Zouari R, Karaouzene T, Rendu J, Bidart M, Yassine S, Pierre V, Delaroche J, Hennebicq S, Grunwald D, Escalier D, Pernet-Gallay K, Jouk PS, Thierry-Mieg N, Toure A, Arnoult C, Ray PF.

American Journal of Human Genetics 2014 Jan; 94(1):95.

Application: IF, Human, Spermatozoa

- [DYX1C1 is required for axonemal dynein assembly and ciliary motility.](#)

Tarkar A, Loges NT, Slagle CE, Francis R, Dougherty GW, Tamayo JV, Shook B, Cantino M, Schwartz D, Jahnke C, Olbrich H, Werner C, Raidt J, Pennekamp P, Abouhamed M, Hjeij R, Kohler G, Griesse M, Li Y, Lemke K, Klena N, Liu X, Gabriel G, Tobita K, Jaspers M, Morgan LC, Shapiro AJ, Letteboer SJ, Mans DA, Carson JL, Leigh MW, Wolf WE, Chen S, Lucas JS, Onoufriadis A, Plagnol V, Schmidts M, Boldt K, Roepman R, Zariwala MA, Lo CW, Mitchison HM, Knowles MR, Burdine RD, Loturco JJ, Omran H.

Nature Genetics 2013 Sep; 45(9):995.

Application: IF, WB, Human, Mouse, Human respiratory epithelium, Mouse trachea

- [Ktu/PF13 is required for cytoplasmic pre-assembly of axonemal dyneins.](#)

Omran H, Kobayashi D, Olbrich H, Tsukahara T, Loges NT, Hagiwara H, Zhang Q, Leblond G, O'Toole E, Hara C, Mizuno H, Kawano H, Fliegauf M, Yagi T, Koshida S, Miyawaki A, Zentgraf H, Seithe H, Reinhardt R, Watanabe Y, Kamiya R, Mitchell DR, Takeda H.

Nature 2008 Dec; 456(7222):611.

Application: Func, IF, Mouse, Human, Testis, Respiratory cells

- [DNAI2 Mutations Cause Primary Ciliary Dyskinesia with Defects in the Outer Dynein Arm.](#)

Loges NT, Olbrich H, Fenske L, Mussaffi H, Horvath J, Fliegauf M, Kuhl H, Baktai G, Peterffy E, Chodhari R, Chung EM, Rutman A, O'Callaghan C, Blau H, Tiszlavicz L, Voelkel K, Witt M, Zietkiewicz E, Neesen J, Reinhardt R, Mitchison HM, Omran H.

American Journal of Human Genetics 2008 Oct; 83(5):547.

Application: IF, WB, Human, Respiratory epithelial cells are obtained by nasal-brush biopsy

Disease

- [Tobacco Use Disorder](#)