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DNAI2 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant DNAI2.
Catalog # AT1786a

Product Information

Application	WB, IF, E
Primary Accession	Q9GZS0
Other Accession	BC039582
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a kappa
Clone Names	1C8
Calculated MW	68821

Additional Information

Gene ID	64446
Other Names	Dynein intermediate chain 2, axonemal, Axonemal dynein intermediate chain 2, DNAI2
Target/Specificity	DNAI2 (AAH39582, 1 a.a. ~ 593 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IF~~1:50~200 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	DNAI2 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

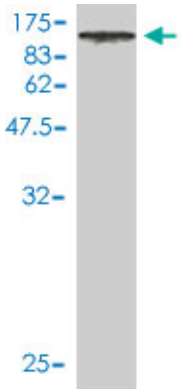
The protein encoded by this gene belongs to the dynein intermediate chain family, and is part of the dynein complex of respiratory cilia and sperm flagella. Mutations in this gene are associated with primary ciliary dyskinesia type 9. Alternatively spliced transcript variants encoding different isoforms have been noted for this gene.

References

1.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 HJ Cell Biol. 2014 Jan 20;204(2):203-13. doi: 10.1083/jcb.201304076. Epub 2014 Jan 13.2.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 PFAm J Hum Genet. 2014 Jan 2;94(1):95-104. doi: 10.1016/j.ajhg.2013.11.017. Epub 2013 Dec 19.3.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, Griese 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 HNat Genet. 2013 Jul 21. doi: 10.1038/ng.2707.4.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 4;456(7222):611-6.5.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.Am J Hum Genet. 2008 Nov;83(5):547-58. Epub 2008 Oct 23.

Images



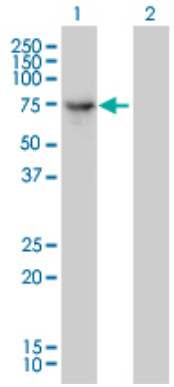
Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (90.97 KDa) .

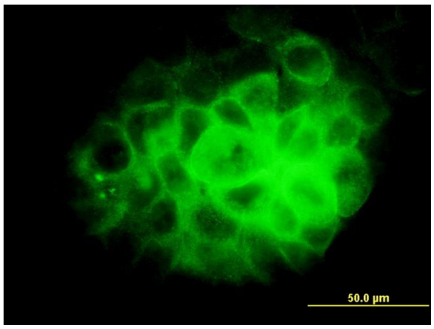


DNAI2 monoclonal antibody (M01), clone 1C8 Western Blot analysis of DNAI2 expression in A-431 ((Cat # AT1786a)

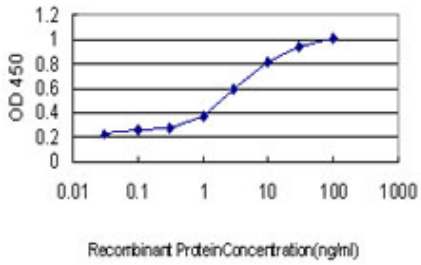
Western Blot analysis of DNAI2 expression in transfected 293T cell line by DNAI2 monoclonal antibody (M01), clone 1C8.

Lane 1: DNAI2 transfected lysate(67 KDa).
Lane 2: Non-transfected lysate.





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



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.