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CETN3 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant CETN3.
Catalog # AT1505a

Product Information

Application	WB, E
Primary Accession	O15182
Other Accession	BC005383
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2b Kappa
Clone Names	3E7
Calculated MW	19550

Additional Information

Gene ID	1070
Other Names	Centrin-3, CETN3, CEN3
Target/Specificity	CETN3 (AAH05383, 1 a.a. ~ 100 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 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	CETN3 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

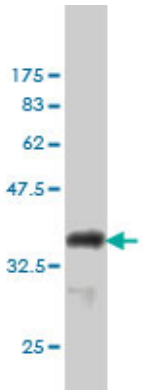
Background

The protein encoded by this gene contains four EF-hand calcium binding domains, and is a member of the centrin protein family. Centrins are evolutionarily conserved proteins similar to the CDC31 protein of S. cerevisiae. Yeast CDC31 is located at the centrosome of interphase and mitotic cells, where it plays a fundamental role in centrosome duplication and separation. Multiple forms of the proteins similar to the yeast centrin have been identified in human and other mammalian cells, some of which have been shown to be associated with centrosome fractions. This protein appears to be one of the most abundant centrins associated with centrosome, which suggests a similar function to its yeast counterpart.

References

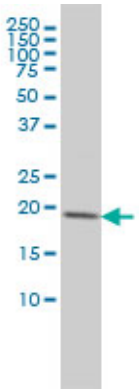
1.Centmitor-1, a novel acridinyl-acetohydrazide, possesses similar molecular interaction field and antimitotic cellular phenotype as rigosertib, on 01910.na.Maki-Jouppila JH, Laine LJ, Rehnberg J, Narvi E, Tiikkainen P, Hukasova E, Halonen P, Lindqvist A, Kallio L, Poso A, Kallio MJMol Cancer Ther. 2014 May;13(5):1054-66. doi: 10.1158/1535-7163.MCT-13-0685. Epub 2014 Apr 18.2.Loss of centrioles causes chromosomal instability in vertebrate somatic cells.Sir JH, Putz M, Daly O, Morrison CG, Dunning M, Kilmartin JV, Gergely FJ Cell Biol. 2013 Dec 9;203(5):747-56. doi: 10.1083/jcb.201309038. Epub 2013 Dec 2.3.Abnormal centrosomal structure and duplication in Cep135-deficient vertebrate cells.Inanc B, Puetz M, Lalor P, Dockery P, Kuriyama R, Gergely F, Morrison CGMol Biol Cell. 2013 Jul 17.4.Calcium-Binding Capacity of Centrin2 Is Required for Linear POC5 Assembly but Not for Nucleotide Excision Repair.Dantas TJ, Daly OM, Conroy PC, Tomas M, Wang Y, Lalor P, Dockery P, Ferrando-May E, Morrison CGPLoS One. 2013 Jul 2;8(7):e68487. doi: 10.1371/journal.pone.0068487. Print 2013.5.FAM190A Deficiency Creates a Cell Division Defect.Patel K, Scrimieri F, Ghosh S, Zhong J, Kim MS, Ren YR, Morgan RA, Iacobuzio-Donahue CA, Pandey A, Kern SEAm J Pathol. 2013 May 9. pii: S0002-9440(13)00280-0. doi: 10.1016/j.ajpath.2013.03.020.6.The Rilp-like proteins Rilpl1 and Rilpl2 regulate ciliary membrane content.Schaub JR, Stearns TMol Biol Cell. 2013 Feb;24(4):453-64. doi: 10.1091/mbc.E12-08-0598. Epub 2012 Dec 21.7.Disruption of mouse cenpj, a regulator of centriole biogenesis, phenocopies seckel syndrome.McIntyre RE, Lakshminarasimhan Chavali P, Ismail O, Carragher DM, Sanchez-Andrade G, Forment JV, Fu B, Del Castillo Velasco-Herrera M, Edwards A, van der Weyden L, Yang F, Ramirez-Solis R, Estabel J, Gallagher FA, Logan DW, Arends MJ, Tsang SH, Mahajan VB, Scudamore CL, White JK, Jackson SP, Gergely F, Adams DJ.PLoS Genet. 2012 Nov;8(11):e1003022. doi: 10.1371/journal.pgen.1003022. Epub 2012 Nov 15.8.C-NAP1 and rootletin restrain DNA damage-induced centriole splitting and facilitate ciliogenesis.Conroy PC, Saladino C, Dantas TJ, Lalor P, Dockery P, Morrison CG.Cell Cycle. 2012 Oct 15;11(20):3769-78. doi: 10.4161/cc.21986.9.DNA damage-induced centrosome amplification occurs via excessive formation of centriolar satellites.Loffler H, Fechter A, Liu FY, Poppelreuther S, Kramer A.Oncogene. 2012 Jul 23. doi: 10.1038/onc.2012.310.10.A primary microcephaly protein complex forms a ring around parental centrioles.Sir JH, Barr AR, Nicholas AK, Carvalho OP, Khurshid M, Sossick A, Reichelt S, D'Santos C, Woods CG, Gergely F.Nat Genet. 2011 Oct 9;43(11):1147-53. doi: 10.1038/ng.971.11.Defective nucleotide excision repair with normal centrosome structures and functions in the absence of all vertebrate centrins.Dantas TJ, Wang Y, Lalor P, Dockery P, Morrison CG.J Cell Biol. 2011 Apr 11. [Epub ahead of print]12.TPCK targets elements of mitotic spindle and induces cell cycle arrest in prometaphase.Fabian Z, Fearnhead HO.Biochem Biophys Res Commun. 2010 Apr 8. [Epub ahead of print]13.CDK5RAP2 functions in centrosome to spindle pole attachment and DNA damage response.Barr AR, Kilmartin JV, Gergely F.J Cell Biol. 2010 Apr 5;189(1):23-39.

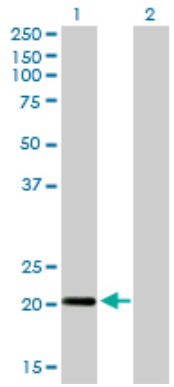
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.63 KDa) .

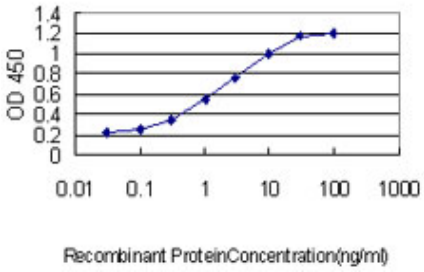
CETN3 monoclonal antibody (M01), clone 3E6 Western Blot analysis of CETN3 expression in Jurkat ((Cat # AT1505a)



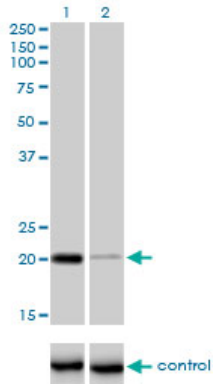


Western Blot analysis of CETN3 expression in transfected 293T cell line by CETN3 monoclonal antibody (M01), clone 3E6.

Lane 1: CETN3 transfected lysate(19.5 KDa).
Lane 2: Non-transfected lysate.



Detection limit for recombinant GST tagged CETN3 is approximately 0.1ng/ml as a capture antibody.



Western blot analysis of CETN3 over-expressed 293 cell line, cotransfected with CETN3 Validated Chimera RNAi ((Cat # AT1505a)

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