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RNF111 Antibody (monoclonal) (M05)

Mouse monoclonal antibody raised against a partial recombinant RNF111.
Catalog # AT3657a

Product Information

Application	WB, IF, E
Primary Accession	Q6ZNA4
Other Accession	NM_017610
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	1C4

Additional Information

Other Names	E3 ubiquitin-protein ligase Arkadia, 632-, RING finger protein 111, RNF111
Target/Specificity	RNF111 (NP_060080, 1 a.a. ~ 108 a.a) partial 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	RNF111 Antibody (monoclonal) (M05) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

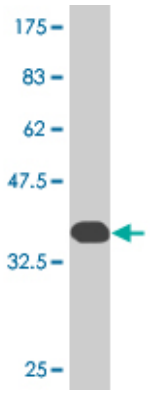
The protein encoded by this gene contains a RING finger domain, a motif known to be involved in protein-protein and protein-DNA interactions. The mouse counterpart of this gene (Rnf111/arkadia) has been shown to genetically interact with the transforming growth factor (TGF) beta-like factor Nodal, and act as a modulator of the nodal signaling cascade, which is essential for the induction of mesoderm during embryonic development.

References

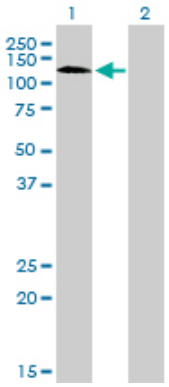
1.RNF111/Arkadia is a SUMO-targeted ubiquitin ligase that facilitates the DNA damage response.Poulsen SL, Hansen RK, Wagner SA, van Cuijk L, van Belle GJ, Streicher W, Wikstrom M, Choudhary C, Houtsmuller AB, Marteijn JA, Bekker-Jensen S, Mailand NJ Cell Biol. 2013 Jun 10;201(6):797-807. doi: 10.1083/jcb.201212075.2.Arkadia, a Novel SUMO-Targeted Ubiquitin Ligase Involved in PML Degradation.Erker Y, Neyret-Kahn H, Seeler JS, Dejean A, Atfi A, Levy LMol Cell Biol. 2013 Jun;33(11):2163-77. doi: 10.1128/MCB.01019-12. Epub 2013 Mar 25.3.RNF111-Dependent Neddylation Activates DNA

Damage-Induced Ubiquitination.Ma T, Chen Y, Zhang F, Yang CY, Wang S, Yu XMol Cell. 2013 Mar 7;49(5):897-907. doi: 10.1016/j.molcel.2013.01.006. Epub 2013 Feb 7.4.RB1CC1 positively regulates transforming growth factor-{beta} signaling through the modulation of Arkadia E3 ubiquitin ligase activity.Koinuma D, Shinozaki M, Nagano Y, Ikushima H, Horiguchi K, Goto K, Chano T, Saitoh M, Imamura T, Miyazono K, Miyazawa K.J Biol Chem. 2011 Jul 27. [Epub ahead of print]5.Efficient TGF-beta/SMAD signaling in human melanoma cells associated with high c-SKI/SnoN expression.Javelaud D, van Kempen L, Alexaki VI, Le Scolan E, Luo K, Mauviel A.Mol Cancer. 2011 Jan 6;10(1):2.6.Context-dependent regulation of the expression of c-Ski protein by Arkadia in human cancer cells.Nagano Y, Koinuma D, Miyazawa K, Miyazono K.J Biochem. 2010 Apr;147(4):545-54. Epub 2009 Dec 2.7.Overexpression of snon/skil, amplified at the 3q26.2 locus, in ovarian cancers: a role in ovarian pathogenesis.Nanjundan M, Cheng KW, Zhang F, Lahad J, Kuo WL, Schmandt R, Smith-McCune K, Fishman D, Gray JW, Mills GB.Mol Oncol. 2008 Aug;2(2):164-81. Epub 2008 May 10.8.Arkadia activates Smad3/Smad4-dependent transcription by triggering signal-induced SnoN degradation.Levy L, Howell M, Das D, Harkin S, Episkopou V, Hill CS.Mol Cell Biol. 2007 Sep;27(17):6068-83. Epub 2007 Jun 25.

Images

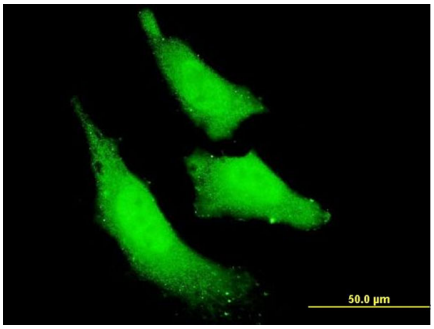


Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (37.62 KDa) .



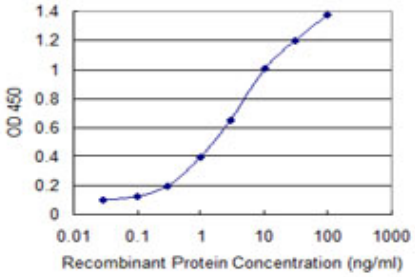
Western Blot analysis of RNF111 expression in transfected 293T cell line by RNF111 monoclonal antibody (M05), clone 1C4.

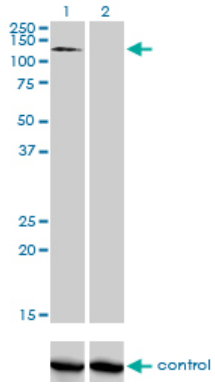
Lane 1: RNF111 transfected lysate(107.8 KDa).
Lane 2: Non-transfected lysate.



Immunofluorescence of monoclonal antibody to RNF111 on HeLa cell . [antibody concentration 10 ug/ml]

Detection limit for recombinant GST tagged RNF111 is 0.03 ng/ml as a capture antibody.





Western blot analysis of RNF111 over-expressed 293 cell line, cotransfected with RNF111 Validated Chimera RNAi ((Cat # AT3657a)

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