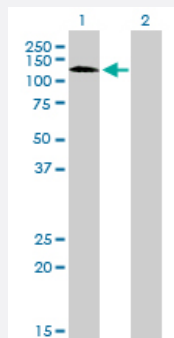


RNF111 monoclonal antibody (M05), clone 1C4

Catalog # H00054778-M05

Size 100 ug

Applications

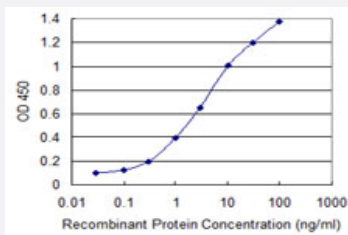


Western Blot (Transfected lysate)

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

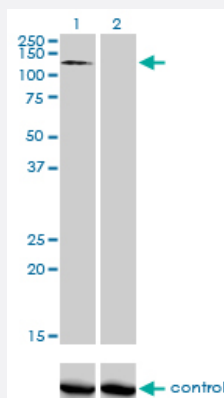
Lane 1: RNF111 transfected lysate (107.8 kDa).

Lane 2: Non-transfected lysate.



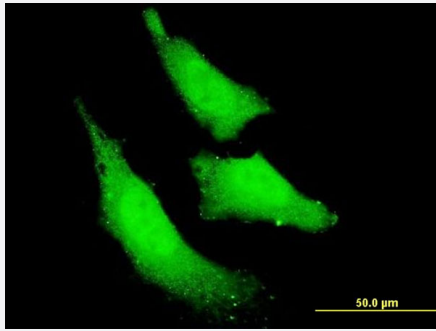
Sandwich ELISA (Recombinant protein)

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



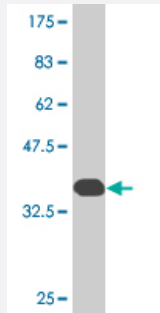
RNAi Knockdown (Antibody validated)

Western blot analysis of RNF111 over-expressed 293 cell line, cotransfected with RNF111 Validated Chimera RNAi (Cat # H00054778-R01V) (Lane 2) or non-transfected control (Lane 1). Blot probed with RNF111 monoclonal antibody (M05), clone 1C4 (Cat # H00054778-M05). GAPDH (36.1 kDa) used as specificity and loading control.



Immunofluorescence

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



Western Blot detection against Immunogen (37.62 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a partial recombinant RNF111.
Immunogen	RNF111 (NP_060080, 1 a.a. ~ 108 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	MSQWTPEYNELYTLKVDKSEIPSDAPKTQESLKGILLHPEPIGAAKSFPAGVEMINSKVGNEFSH LCDDSQKQEKEMNGNQEQEQLVVRKKRKSQQAGPSYVQNC
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Mouse (89); Rat (89)
Isotype	IgG2a Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (37.62 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 (Transfected lysate)

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.

[Protocol Download](#)

- Western Blot (Recombinant protein)

[Protocol Download](#)

- Sandwich ELISA (Recombinant protein)

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

[Protocol Download](#)

- ELISA

- RNAi Knockdown (Antibody validated)

Western blot analysis of RNF111 over-expressed 293 cell line, cotransfected with RNF111 Validated Chimera RNAi (Cat # H00054778-R01V) (Lane 2) or non-transfected control (Lane 1). Blot probed with RNF111 monoclonal antibody (M05), clone 1C4 (Cat # H00054778-M05). GAPDH (36.1 kDa) used as specificity and loading control.

[Protocol Download](#)

- Immunofluorescence

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

Gene Info — RNF111

Entrez GeneID	54778
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GeneBank Accession#	NM_017610
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Protein Accession#	NP_060080
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Gene Name	RNF111
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Gene Alias	ARK, DKFZp313E0731, DKFZp686H1966, DKFZp761D081, FLJ38008
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Gene Description	ring finger protein 111
Omim ID	605840
Gene Ontology	Hyperlink
Gene Summary	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. [provided by RefSeq]
Other Designations	Arkadia

Publication Reference

- [The UAS thioredoxin-like domain of UBXN7 regulates E3 ubiquitin ligase activity of RNF111/Arkadia.](#)

Sadek Amhaz, Batiste Boëda, Mouna Chouchène, Sabrina Colasse, Florent Dingli, Damarys Loew, Julien Henri, Céline Prunier, Laurence Levy.

BMC Biology 2023 Apr; 21(1):73.

Application: WB-Ce, WB-Tr, Human , HKE293, U2OS cells

- [Quantitative ubiquitylome analysis reveals specificity of RNF111/Arkadia E3 ubiquitin ligase for its degradative substrates SKI and SKIL/SnoN in TGF-β signaling pathway.](#)

Victor Laigle, Florent Dingli, Sadek Amhaz, Tiphaine Perron, Mouna Chouchène, Sabrina Colasse, Isabelle Petit, Patrick Pouillet, Damarys Loew, Céline Prunier, Laurence Levy.

Molecular & Cellular proteomics: MCP 2021 Nov; 20:100173.

Application: WB-Ce, WB-Tr, Human, U-2 OS cells

- [Arkadia \(RING Finger Protein 111\) Mediates Sumoylation-Dependent Stabilization of Nrf2 Through K48-Linked Ubiquitination.](#)

McIntosh DJ, Walters TS, Arinze IJ, Davis J.

Cellular Physiology and Biochemistry 2018 Mar; 46(1):418.

Application: WB, Human, HepG2 cells

- [SUMO and ubiquitin-dependent XPC exchange drives nucleotide excision repair.](#)

van Cuijk L, van Belle GJ, Turkyilmaz Y, Poulsen SL, Janssens RC, Theil AF, Sabatella M, Lans H, Mailand N, Houtsmuller AB, Vermeulen W, Marteijn JA.

Nature Communications 2015 Jul; 6:7499.

Application: WB-Ce, Human, HeLa/FLAG-SUMO2 cells

- [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, Martelijn JA, Bekker-Jensen S, Mailand N.

The Journal of Cell Biology 2013 Jun; 201(6):797.

Application: WB-Tr, Human, U2OS cells

- [Arkadia, a Novel SUMO-Targeted Ubiquitin Ligase Involved in PML Degradation.](#)

Erker Y, Neyret-Kahn H, Seeler JS, Dejean A, Atfi A, Levy L.

Molecular and Cellular Biology 2013 Jun; 33(11):2163.

Application: WB-Tr, Human, HeLa, HEK 293, HT1080-GFP-PML cells

- [RNF111-Dependent Neddylation Activates DNA Damage-Induced Ubiquitination.](#)

Ma T, Chen Y, Zhang F, Yang CY, Wang S, Yu X.

Molecular Cell 2013 Mar; 49(5):897.

Application: WB, Human, U2OS cells

- [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.

The Journal of Biological Chemistry 2011 Sep; 286(37):32502.

Application: WB-Tr, Human, HaCaT, HEK 293T cells

- [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.

Molecular Cancer 2011 Jan; 10(1):2.

Application: WB, Human, Melanoma cells

- [Context-dependent regulation of the expression of c-Ski protein by Arkadia in human cancer cells.](#)

Nagano Y, Koinuma D, Miyazawa K, Miyazono K.

Journal of Biochemistry 2010 Apr; 147(4):545.

Application: WB-Tr, Human, OCUM-2MLN

- [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.

Molecular Oncology 2008 May; 2(2):164.

Application: WB-Ti, Human, Human ovarian cancer

- [Arkadia activates Smad3/Smad4-dependent transcription by triggering signal-induced SnoN degradation.](#)

Levy L, Howell M, Das D, Harkin S, Episkopou V, Hill CS.

Molecular and Cellular Biology 2007 Jun; 27(17):6068.

Application: WB-Tr, Human, HaCaT cells