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ARF5 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant ARF5.
Catalog # AT1176a

Product Information

Application	WB, IF, E
Primary Accession	P84085
Other Accession	BC003043
Reactivity	Human, Mouse, Rat
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	1B4
Calculated MW	20530

Additional Information

Gene ID	381
Other Names	ADP-ribosylation factor 5, ARF5
Target/Specificity	ARF5 (AAH03043, 81 a.a. ~ 180 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	ARF5 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

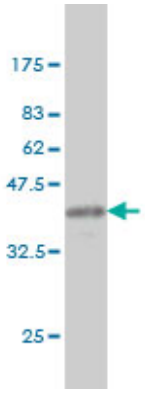
Background

ADP-ribosylation factor 5 (ARF5) is a member of the human ARF gene family. These genes encode small guanine nucleotide-binding proteins that stimulate the ADP-ribosyltransferase activity of cholera toxin and play a role in vesicular trafficking and as activators of phospholipase D. The gene products include 6 ARF proteins and 11 ARF-like proteins and constitute 1 family of the RAS superfamily. The ARF proteins are categorized as class I (ARF1, ARF2,and ARF3), class II (ARF4 and ARF5) and class III (ARF6). The members of each class share a common gene organization. The ARF5 gene spans approximately 3.2kb of genomic DNA and contains six exons and five introns.

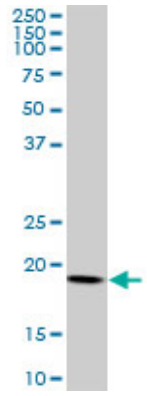
References

1.A CREB3-ARF4 signalling pathway mediates the response to Golgi stress and susceptibility to pathogens.Reiling JH, Olive AJ, Sanyal S, Carette JE, Brummelkamp TR, Ploegh HL, Starnbach MN, Sabatini DMNat Cell Biol. 2013 Dec;15(12):1473-85. doi: 10.1038/ncb2865. Epub 2013 Nov 3.2.ARF1 and ARF4 regulate recycling endosomal morphology and retrograde transport from endosomes to the Golgi apparatus.Nakai W, Kondo Y, Saitoh A, Naito T, Nakayama K, Shin HWMol Biol Cell. 2013 Aug;24(16):2570-81. doi: 10.1091/mbc.E13-04-0197. Epub 2013 Jun 19.3.GBF1-Arf-COPI-ArfGAP-mediated Golgi-to-ER transport involved in regulation of lipid homeostasis.Takashima K, Saitoh A, Hirose S, Nakai W, Kondo Y, Takasu Y, Kakeya H, Shin HW, Nakayama K.Cell Struct Funct. 2011;36(2):223-35.4.Class II ADP-Ribosylation factors are required for efficient secretion of dengue viruses.Kudelko M, Brault JB, Kwok K, Li MY, Pardigon N, Peiris JS, Bruzzone R, Despres P, Nal B, Wang PG.J Biol Chem. 2011 Nov 21.5.Interaction of phosphodiesterase 3A with brefeldin A-inhibited guanine nucleotide-exchange proteins BIG1 and BIG2 and effect on ARF1 activity.Puxeddu E, Uhart M, Li CC, Ahmad F, Pacheco-Rodriguez G, Manganiello VC, Moss J, Vaughan M.Proc Natl Acad Sci U S A. 2009 Apr 14;106(15):6158-63. Epub 2009 Mar 30.6.EFA6 facilitates the assembly of the tight junction by coordinating an Arf6-dependent and independent pathway.Klein S, Partisani M, Franco M, Luton F.J Biol Chem. 2008 Oct 31;283(44):30129-38. Epub 2008 Sep 8.7.The brefeldin A-inhibited guanine nucleotide-exchange protein, BIG2, regulates the constitutive release of TNFR1 exosome-like vesicles.Islam A, Shen X, Hiroi T, Moss J, Vaughan M, Levine SJ.J Biol Chem. 2007 Mar 30;282(13):9591-9. Epub 2007 Feb 2.

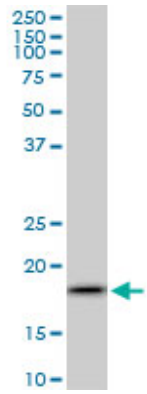
Images



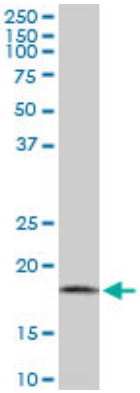
Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.63 KDa) .



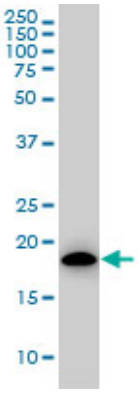
ARF5 monoclonal antibody (M01), clone 1B4. Western Blot analysis of ARF5 expression in HeLa ((Cat # AT1176a)



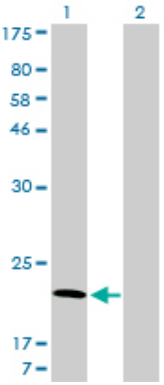
ARF5 monoclonal antibody (M01), clone 1B4. Western Blot analysis of ARF5 expression in PC-12((Cat # AT1176a)



ARF5 monoclonal antibody (M01), clone 1B4. Western Blot analysis of ARF5 expression in Raw 264.7((Cat # AT1176a)

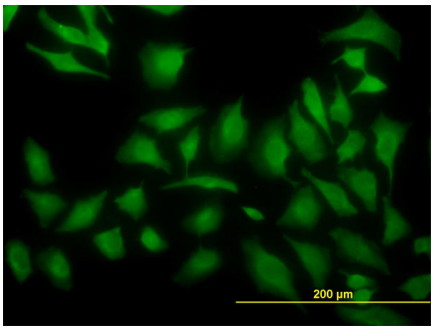


ARF5 monoclonal antibody (M01), clone 1B4 Western Blot analysis of ARF5 expression in A-431 ((Cat # AT1176a)

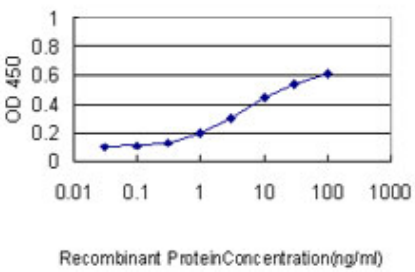


Western Blot analysis of ARF5 expression in transfected 293T cell line by ARF5 monoclonal antibody (M01), clone 1B4.

Lane 1: ARF5 transfected lysate(20.5 KDa).
Lane 2: Non-transfected lysate.



Immunofluorescence of monoclonal antibody to ARF5 on HeLa cell. [antibody concentration 15 ug/ml]



Detection limit for recombinant GST tagged ARF5 is approximately 0.3ng/ml as a capture antibody.

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