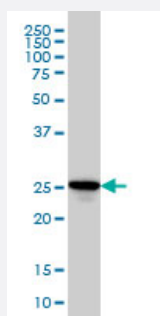


RAB27A monoclonal antibody (M02), clone 1G7

Catalog # H00005873-M02

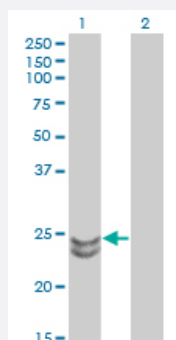
Size 100 ug

Applications



Western Blot (Cell lysate)

RAB27A monoclonal antibody (M02), clone 1G7 Western Blot analysis of RAB27A expression in HL-60 (Cat # L014V1).

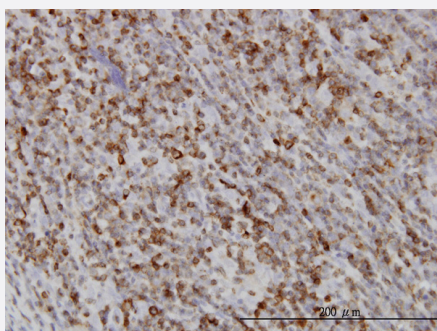


Western Blot (Transfected lysate)

Western Blot analysis of RAB27A expression in transfected 293T cell line by RAB27A monoclonal antibody (M02), clone 1G7.

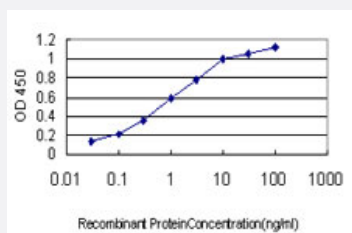
Lane 1: RAB27A transfected lysate(24.9 KDa).

Lane 2: Non-transfected lysate.



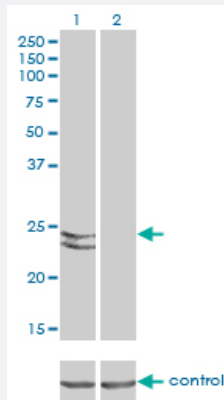
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to RAB27A on formalin-fixed paraffin-embedded human lymphoma. [antibody concentration 3 ug/ml]



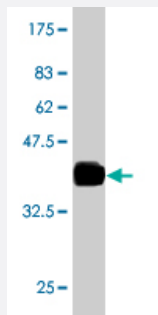
Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged RAB27A is approximately 0.03ng/ml as a capture antibody.



RNAi Knockdown (Antibody validated)

Western blot analysis of RAB27A over-expressed 293 cell line, cotransfected with RAB27A Validated Chimera RNAi (Cat # H00005873-R01V) (Lane 2) or non-transfected control (Lane 1). Blot probed with RAB27A monoclonal antibody (M02), clone 1G7 (Cat # H00005873-M02). GAPDH (36.1 kDa) used as specificity and loading control.



Western Blot detection against Immunogen (36.74 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a partial recombinant RAB27A.
Immunogen	RAB27A (NP_004571, 122 a.a. ~ 221 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	YCENPDMLCGNKSLEDQRVVKEEEAIALAEKYGIPYFETSAANGTNISQAIEMLLDLIMKRMERC VDKSWIPEGVVRSNGHASTDQLSEEKEKGACGC
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Mouse (93); Rat (95)
Isotype	IgG1 Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.74 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 (Cell lysate)

RAB27A monoclonal antibody (M02), clone 1G7 Western Blot analysis of RAB27A expression in HL-60 (Cat # L014V1).

[Protocol Download](#)

- Western Blot (Transfected lysate)

Western Blot analysis of RAB27A expression in transfected 293T cell line by RAB27A monoclonal antibody (M02), clone 1G7.

Lane 1: RAB27A transfected lysate(24.9 KDa).

Lane 2: Non-transfected lysate.

[Protocol Download](#)

- Western Blot (Recombinant protein)

[Protocol Download](#)

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to RAB27A on formalin-fixed paraffin-embedded human lymphoma. [antibody concentration 3 ug/ml]

[Protocol Download](#)

- Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged RAB27A is approximately 0.03ng/ml as a capture antibody.

[Protocol Download](#)

- ELISA

- RNAi Knockdown (Antibody validated)

Western blot analysis of RAB27A over-expressed 293 cell line, cotransfected with RAB27A Validated Chimera RNAi (Cat # H00005873-R01V) (Lane 2) or non-transfected control (Lane 1). Blot probed with RAB27A monoclonal antibody (M02), clone 1G7 (Cat # H00005873-M02). GAPDH (36.1 kDa) used as specificity and loading control.

[Protocol Download](#)

Gene Info — RAB27A

Entrez GeneID

[5873](#)

GeneBank Accession#	NM_004580
Protein Accession#	NP_004571
Gene Name	RAB27A
Gene Alias	GS2, HsT18676, MGC117246, RAB27, RAM
Gene Description	RAB27A, member RAS oncogene family
Omim ID	603868 607624
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene belongs to the small GTPase superfamily, Rab family. The protein is membrane-bound and may be involved in protein transport and small GTPase mediated signal transduction. Mutations in this gene are associated with Griscelli syndrome type 2. Alternative splicing occurs at this locus and four transcript variants encoding the same protein have been identified. [provided by RefSeq]
Other Designations	GTP-binding protein Ram Ras-related protein Rab-27A

Publication Reference

- [SMC3 epigenetic silencing regulates Rab27a expression and drives pancreatic cancer progression.](#)

Nuno Bastos, Stéphanie A Castaldo, Bárbara Adem, José C Machado, Carlos A Melo, Sonia A Melo.

Journal of Translational Medicine 2023 Aug; 21(1):578.

Application: WB, Human, BxPC-3, MIA PaCa-2, PANC-1 cells

- [Extracellular Vesicles from Pancreatic Cancer Stem Cells Lead an Intratumor Communication Network \(EVNet\) to fuel tumour progression.](#)

Carolina F Ruivo, Nuno Bastos, Barbara Adem, Ines Batista, Cecilia Duraes, Carlos A Melo, Stephanie A Castaldo, Francisco Campos-Laborie, Pedro Moutinho-Ribeiro, Barbara Morão, Ana Costa-Pinto, Soraia Silva, Hugo Osorio, Sergio Ciordia, Jose Luis Costa, David Goodrich, Bruno Cavadas, Luisa Pereira, Tony Kouzarides, Guilherme Macedo, Rui Maio, Fatima Carneiro, Marília Cravo, Raghu Kalluri, Jose Carlos Machado, Sonia A Melo.

Gut 2022 Jan; 71(10):2043.

Application: WB-Tr, Human, Mia PaCa-2 cells

- [Exosome-mediated transfer of miR-222 is sufficient to increase tumor malignancy in melanoma.](#)

Felicetti F, De Feo A, Coscia C, Puglisi R, Pedini F, Pasquini L, Bellenghi M, Errico MC, Pagani E, Carè A.

Journal of Translational Medicine 2016 Feb; 14(1):56.

Application: WB-Tr, Human, Me1007, Me1402/R cells

- [PML-RARa modulates the vascular signature of extracellular vesicles released by acute promyelocytic leukemia cells.](#)

Fang Y, Garnier D, Lee TH, D'Asti E, Montermini L, Meehan B, Rak J.

Angiogenesis 2016 Jan; 19(1):25.

Application: WB-Ce, Human, NB4 cells, NB4EVs

- [Supporting Role for GTPase Rab27a in Hepatitis C Virus RNA Replication through a Novel miR-122-Mediated Effect.](#)

Chen TC, Hsieh CH, Sarnow P.

PLoS Pathogens 2015 Aug; 11(8):e1005116.

Application: IF, WB-Tr, Human, Huh7 cells

- [Exosome-mediated microRNA signaling from breast cancer cells is altered by the anti-angiogenesis agent docosahexaenoic acid \(DHA\).](#)

Hannafon BN, Carpenter KJ, Berry WL, Janknecht R, Dooley WC, Ding WQ.

Molecular Cancer 2015 Jul; 14:133.

Application: WB-Tr, Human, MCF-7 cells

- [Patients with Griscelli syndrome and normal pigmentation identify RAB27A mutations that selectively disrupt MUNC13-4 binding.](#)

Cetica V, Hackmann Y, Grieve S, Sieni E, Ciambotti B, Coniglio ML, Pende D, Gilmour K, Romagnoli P, Griffiths GM, Arico M.

The Journal of Allergy and Clinical Immunology 2015 May; 135(5):1310.

Application: WB-Ce, Human, Cytotoxic T lymphocytes

- [Activated Cdc42-Bound IQGAP1 Determines the Cellular Endocytic Site.](#)

Kimura T, Yamaoka M, Taniguchi S, Okamoto M, Takei M, Ando T, Iwamatsu A, Watanabe T, Kaibuchi K, Ishizaki T, Niki I.

Molecular and Cellular Biology 2013 Dec; 33(24):4834.

Application: IP-WB, WB-Ce, WB-Tr, Mouse, MIN6 cells

- [Melanoma exosomes educate bone marrow progenitor cells toward a pro-metastatic phenotype through MET.](#)

Peinado H, Alečković M, Lavotshkin S, Matei I, Costa-Silva B, Moreno-Bueno G, Hergueta-Redondo M, Williams C, García-Santos G, Ghajar C, Nitadori-Hoshino A, Hoffman C, Badal K, Garcia BA, Callahan MK, Yuan J, Martins VR, Skog J, Kaplan RN, Brady MS, Wolchok JD, Chapman PB, Kang Y, Bromberg J, Lyden D.

Nature Medicine 2012 Jun; 18(6):883.

Application: WB, Human, AsPc1, MCF-7, MDA-MB-231, SkBr3, SK-Mel cells

- [Stepwise Maturation of Lytic Granules during Differentiation and Activation of Human CD8+ T Lymphocytes.](#)

Sanchez-Ruiz Y, Valitutti S, Dupre L.

PLoS One 2011 Nov; 6(11):e27057.

Application: Flow Cyt, Human, Cytotoxic T lymphocytes

- [Synaptotagmin-like protein 1 interacts with the GTPase-activating protein Rap1GAP2 and regulates dense granule secretion in platelets.](#)

Neumuller O, Hoffmeister M, Babica J, Prella C, Gegenbauer K, Smolenski AP.

Blood 2009 Aug; 114(7):1396.

Application: IF, IP, WB-Ce, WB-Tr, Human, HeLa, Human platelets

- [The GDP-dependent Rab27a effector coronin 3 controls endocytosis of secretory membrane in insulin-secreting cell lines.](#)

Kimura T, Kaneko Y, Yamada S, Ishihara H, Senda T, Iwamatsu A, Niki I.

Journal of Cell Science 2008 Sep; 121(Pt 18):3092.

Application: IF, IP-WB, Mouse, MIN6 cells, Mouse pancreatic β cells, Mouse pancreata

Disease

- [Arthritis](#)
- [Genetic Predisposition to Disease](#)
- [Lymphohistiocytosis](#)