

RACGAP1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant RACGAP1.

Catalog # AT3542a

Product Information

Application	WB, IHC, E
Primary Accession	Q9H0H5
Other Accession	BC032754
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2b Kappa
Clone Names	1G6
Calculated MW	71027

Additional Information

Gene ID	29127
Other Names	Rac GTPase-activating protein 1, Male germ cell RacGap, MgcRacGAP, Protein CYK4 homolog, CYK4, HsCYK-4, RACGAP1 (HGNC:9804)
Target/Specificity	RACGAP1 (AAH32754, 1 a.a. ~ 110 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500 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	RACGAP1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

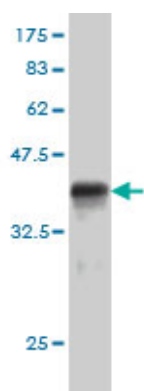
Rho GTPases control a variety of cellular processes. There are 3 subtypes of Rho GTPases in the Ras superfamily of small G proteins: RHO (see MIM 165370), RAC (see RAC1; MIM 602048), and CDC42 (MIM 116952). GTPase-activating proteins (GAPs) bind activated forms of Rho GTPases and stimulate GTP hydrolysis. Through this catalytic function, Rho GAPs negatively regulate Rho-mediated signals. GAPs may also serve as effector molecules and play a role in signaling downstream of Rho and other Ras-like GTPases.

References

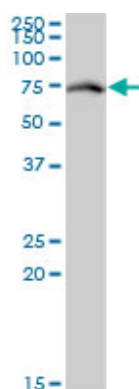
1. Centralspindlin links the mitotic spindle to the plasma membrane during cytokinesis. Lekomtsev S, Su KC,

Pye VE, Blight K, Sundaramoorthy S, Takaki T, Collinson LM, Cherepanov P, Divecha N, Petronczki M. Nature. 2012 Dec 13;492(7428):276-9. doi: 10.1038/nature11773.2. Up-regulation of Rac GTPase activating protein 1 is significantly associated with the early recurrence of human hepatocellular carcinoma. Wang SM, Ooi LL, Hui KM. Clin Cancer Res. 2011 Aug 8. [Epub ahead of print]3. Polo-Like Kinase 1 Directs Assembly of the HsCyk-4 RhoGAP/Ect2 RhoGEF Complex to Initiate Cleavage Furrow Formation. Wolfe BA, Takaki T, Petronczki M, Glotzer M. PLoS Biol. 2009 May 5;7(5):e1000110. Epub 2009 May 26.4. Plk1 self-organization and priming phosphorylation of HsCYK-4 at the spindle midzone regulate the onset of division in human cells. Burkard ME, Maciejowski J, Rodriguez-Bravo V, Repka M, Lowery DM, Clauser KR, Zhang C, Shokat KM, Carr SA, Yaffe MB, Jallepalli PV. PLoS Biol. 2009 May 5;7(5):e1000111. Epub 2009 May 26.

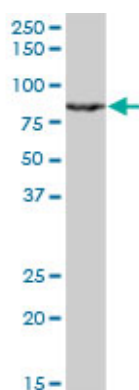
Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (37.73 KDa) .

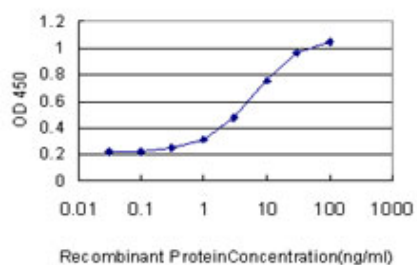
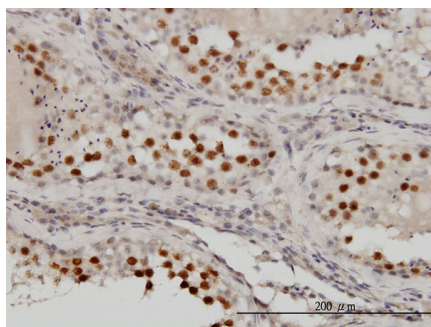


RACGAP1 monoclonal antibody (M01), clone 1G6. Western Blot analysis of RACGAP1 expression in 293 (Cat # AT3542a)



RACGAP1 monoclonal antibody (M01), clone 1G6. Western Blot analysis of RACGAP1 expression in Jurkat (Cat # AT3542a)

Immunoperoxidase of monoclonal antibody to RACGAP1 on formalin-fixed paraffin-embedded human testis. [antibody concentration 1 ug/ml]



Detection limit for recombinant GST tagged RACGAP1 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'.