

# RASA1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant RASA1. Catalog # AT3574a

### **Product Information**

Application Primary Accession	WB, IHC, E P20936
Other Accession	NM 002890
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 kappa
Clone Names	2C12
Calculated MW	116403

### **Additional Information**

Gene ID	5921
Other Names	Ras GTPase-activating protein 1, GAP, GTPase-activating protein, RasGAP, Ras p21 protein activator, p120GAP, RASA1, GAP, RASA
Target/Specificity	RASA1 (NP_002881, 948 a.a. ~ 1047 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	RASA1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

## Background

The protein encoded by this gene is located in the cytoplasm and is part of the GAP1 family of GTPase-activating proteins. The gene product stimulates the GTPase activity of normal RAS p21 but not its oncogenic counterpart. Acting as a suppressor of RAS function, the protein enhances the weak intrinsic GTPase activity of RAS proteins resulting in the inactive GDP-bound form of RAS, thereby allowing control of cellular proliferation and differentiation. Mutations leading to changes in the binding sites of either protein are associated with basal cell carcinomas. Alternative splicing results in two isoforms where the shorter isoform, lacking the N-terminal hydrophobic region but retaining the same activity, appears to be abundantly expressed in placental but not adult tissues.

# References

Identification of several novel non-p.R132 IDH1 variants in thyroid carcinomas. Hemerly JP, et al. Eur J Endocrinol, 2010 Aug 11. PMID 20702649.Backtracking RAS mutations in high hyperdiploid childhood acute lymphoblastic leukemia. Wiemels JL, et al. Blood Cells Mol Dis, 2010 Oct 15. PMID 20688547.MicroRNA-132-mediated loss of p120RasGAP activates the endothelium to facilitate pathological angiogenesis. Anand S, et al. Nat Med, 2010 Aug. PMID 20676106.High frequency type I/II mutational shifts between diagnosis and relapse are associated with outcome in pediatric AML: implications for personalized medicine. Bachas C, et al. Blood, 2010 Jun 30. PMID 20592250.A novel association between RASA1 mutations and spinal arteriovenous anomalies. Thiex R, et al. AJNR Am J Neuroradiol, 2010 Apr. PMID 20007727.

#### Images



2 of 3

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