

# RASSF1 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP17881c

## Product Information

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Application	WB, E
Primary Accession	<a href="#">Q9NS23</a>
Other Accession	<a href="#">NP_009113.3</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB22967
Calculated MW	39219
Antigen Region	103-132

## Additional Information

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Gene ID	11186
Other Names	Ras association domain-containing protein 1, RASSF1 {ECO:0000312   EMBL:AAF351282}
Target/Specificity	This RASSF1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 103-132 amino acids from the Central region of human RASSF1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	RASSF1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## Protein Information

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Name	RASSF1 {ECO:0000312   EMBL:AAF35128.2}
Function	Potential tumor suppressor. Required for death receptor- dependent apoptosis. Mediates activation of STK3/MST2 and STK4/MST1 during Fas-induced apoptosis by preventing their dephosphorylation. When

associated with MOAP1, promotes BAX conformational change and translocation to mitochondrial membranes in response to TNF and TNFSF10 stimulation. Isoform A interacts with CDC20, an activator of the anaphase-promoting complex, APC, resulting in the inhibition of APC activity and mitotic progression. Inhibits proliferation by negatively regulating cell cycle progression at the level of G1/S-phase transition by regulating accumulation of cyclin D1 protein. Isoform C has been shown not to perform these roles, no function has been identified for this isoform. Isoform A disrupts interactions among MDM2, DAXX and USP7, thus contributing to the efficient activation of TP53 by promoting MDM2 self-ubiquitination in cell-cycle checkpoint control in response to DNA damage.

#### Cellular Location

[Isoform A]: Cytoplasm, cytoskeleton. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Cytoplasm, cytoskeleton, spindle. Cytoplasm, cytoskeleton, spindle pole. Nucleus Note=Localizes to cytoplasmic microtubules during interphase, to bipolar centrosomes associated with microtubules during prophase, to spindle fibers and spindle poles at metaphase and anaphase, to the midzone during early telophase, and to the midbody in late telophase in cells. Colocalizes with MDM2 in the nucleus

#### Tissue Location

Isoform A and isoform C are ubiquitously expressed in all tissues tested, however isoform A is absent in many corresponding cancer cell lines. Isoform B is mainly expressed in hematopoietic cells.

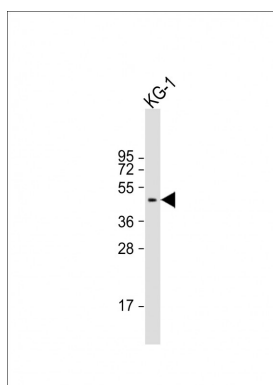
## Background

This gene encodes a protein similar to the RAS effector proteins. Loss or altered expression of this gene has been associated with the pathogenesis of a variety of cancers, which suggests the tumor suppressor function of this gene. The inactivation of this gene was found to be correlated with the hypermethylation of its CpG-island promoter region. The encoded protein was found to interact with DNA repair protein XPA. The protein was also shown to inhibit the accumulation of cyclin D1, and thus induce cell cycle arrest. Seven alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported.

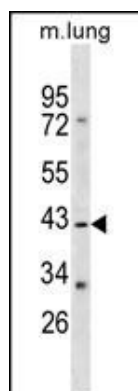
## References

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Vardi, A., et al. *In Vivo* 24(4):393-400(2010)  
Kim, J.H., et al. *Virchows Arch.* 457(1):35-42(2010)  
Ahmed, I.A., et al. *Cancer Genet. Cytogenet.* 199(2):96-100(2010)  
Zhang, H., et al. *Zhongguo Fei Ai Za Zhi* 13(4):311-316(2010)

## Images



Anti-RASSF1 Antibody (Center) at 1:2000 dilution + KG-1 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 39 kDa Blocking/Dilution buffer: 5% NFDm/TBST.



RASSF1 Antibody (Center) (Cat. #AP17881c) western blot analysis in mouse lung tissue lysates (35ug/lane). This demonstrates the RASSF1 antibody detected the RASSF1 protein (arrow).

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