

RASSF1 / RASSF1A Antibody (clone 8E4)
Mouse Monoclonal Antibody
Catalog # ALS15992**Specification**

RASSF1 / RASSF1A Antibody (clone 8E4) - Product Information

Application	WB, IF, IHC
Primary Accession	O9NS23
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	39kDa KDa

RASSF1 / RASSF1A Antibody (clone 8E4) - Additional Information**Gene ID** 11186**Other Names**

Ras association domain-containing protein 1, RASSF1 {ECO:0000312|EMBL:AAF35128.2}

Target/Specificity

Human RASSF1 / RASSF1A

Reconstitution & Storage

Store at -20°C. Minimize freezing and thawing.

Precautions

RASSF1 / RASSF1A Antibody (clone 8E4) is for research use only and not for use in diagnostic or therapeutic procedures.

RASSF1 / RASSF1A Antibody (clone 8E4) - Protein Information**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.

Volume

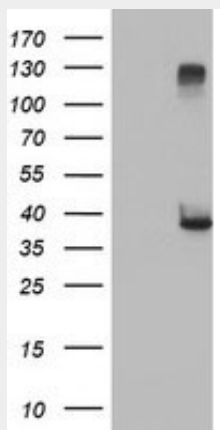
50 µl

RASSF1 / RASSF1A Antibody (clone 8E4) - Protocols

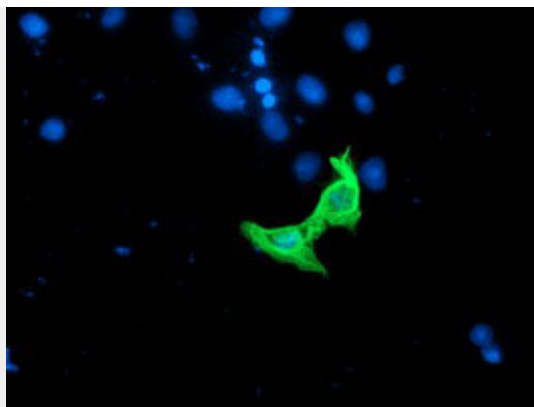
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

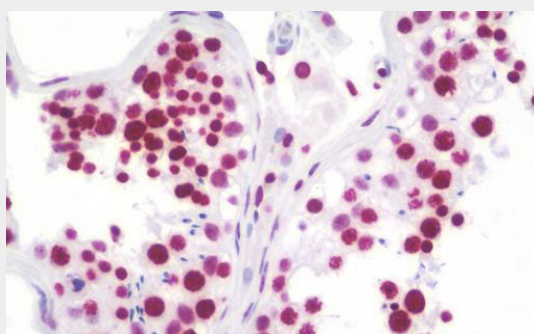
RASSF1 / RASSF1A Antibody (clone 8E4) - Images



HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY RASSF1...



Anti-RASSF1 mouse monoclonal antibody immunofluorescent staining of COS7 cells transiently...



Anti-RASSF1 / RASSF1A antibody IHC staining of human testis.

RASSF1 / RASSF1A Antibody (clone 8E4) - Background

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.

RASSF1 / RASSF1A Antibody (clone 8E4) - References

Dammann R.,et al.Nat. Genet. 25:315-319(2000).
Burbee D.G.,et al.J. Natl. Cancer Inst. 93:691-699(2001).
Kalnine N.,et al.Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.
Muzny D.M.,et al.Nature 440:1194-1198(2006).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.

RASSF1 / RASSF1A Antibody (clone 8E4) - Citations

- [Silencing DNA methyltransferase 1 \(DNMT1\) inhibits proliferation, metastasis and invasion in ESCC by suppressing methylation of RASSF1A and DAPK.](#)
- [Promoter methylation status of tumor suppressor genes and inhibition of expression of DNA methyltransferase 1 in non-small cell lung cancer.](#)