

RASSF1 Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP17881c

Specification

RASSF1 Antibody (Center) Blocking Peptide - Product Information

Primary Accession

Q9NS23

RASSF1 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 11186

Other Names

Ras association domain-containing protein 1, RASSF1 {ECO:0000312|EMBL:AAF351282}

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

RASSF1 Antibody (Center) Blocking Peptide - 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.

RASSF1 Antibody (Center) Blocking Peptide - Protocols

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

• Blocking Peptides

RASSF1 Antibody (Center) Blocking Peptide - Images

RASSF1 Antibody (Center) Blocking Peptide - Background

This gene encodes a protein similar to the RAS effectorproteins. 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.

RASSF1 Antibody (Center) Blocking Peptide - References

El-Kalla, M., et al. Oncogene 29(42):5729-5740(2010)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)