

RASSF3 (m): 293T Lysate: sc-122983

BACKGROUND

Ras is a small GTP-binding protein involved in many cellular processes, including proliferation, differentiation and apoptosis. Ras transmits signals of cell surface receptors by binding to a variety of effector molecules. In addition to the well characterized effectors Raf and PI 3-kinase, Ras also interacts with members of the RASSF family, including RASSF1, RASSF2, RASSF3, RASSF4 and Nore1. Members of the RASSF family contain a highly conserved Ras association domain (Ral GDS/AF-6 or RA) and function as Ras effectors/tumor suppressors. RASSF3 (Ras association domain family 3) is a ubiquitously expressed protein found in normal and cancerous tissues. RASSF3 contains an N-terminal RA domain and a coiled-coil SARAH domain. Three isoforms, namely RASSF3A, RASSF3B and RASSF3C, may exist for RASSF3 due to alternative splicing. RASSF3B and RASSF3C are shorter than RASSF3A and do not contain the RA and SARAH domain.

REFERENCES

1. Tommasi, S., et al. 2002. RASSF3 and NORE: identification and cloning of two human homologues of the putative tumor suppressor gene RASSF1. *Oncogene* 21: 2713-2720.
2. Hesson, L., et al. 2004. Frequent epigenetic inactivation of RASSF1A and BLU genes located within the critical 3p21.3 region in gliomas. *Oncogene* 23: 2408-2419.
3. Eckfeld, K., et al. 2004. RASSF4/AD037 is a potential Ras effector/tumor suppressor of the RASSF family. *Cancer Res.* 64: 8688-8693.
4. Levy, P., et al. 2004. Molecular profiling of malignant peripheral nerve sheath tumors associated with neurofibromatosis type 1, based on large-scale real-time RT-PCR. *Mol. Cancer* 3: 20.
5. Hesson, L.B., et al. 2005. CpG island promoter hypermethylation of a novel Ras-effector gene RASSF2A is an early event in colon carcinogenesis and correlates inversely with K-Ras mutations. *Oncogene* 24: 3987-3994.
6. Lambros, M.B., et al. 2005. Analysis of ovarian cancer cell lines using array-based comparative genomic hybridization. *J. Pathol.* 205: 29-40.
7. van der Weyden, L. and Adams, D.J. 2007. The Ras-association domain family (RASSF) members and their role in human tumorigenesis. *Biochim. Biophys. Acta* 1776: 58-85.
8. Park, S.J., et al. 2008. Induction of apoptosis by Nore1A in a manner dependent on its nuclear export. *Biochem. Biophys. Res. Commun.* 368: 56-61.

CHROMOSOMAL LOCATION

Genetic locus: *Rassf3* (mouse) mapping to 10 D2.

PRODUCT

RASSF3 (m): 293T Lysate represents a lysate of mouse RASSF3 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

RASSF3 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive RASSF3 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.