

ACIN1 / Acinus Antibody (aa775-789) Rabbit Polyclonal Antibody Catalog # ALS12670

Specification

ACIN1 / Acinus Antibody (aa775-789) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Dilution WB, IHC-P, IF, ICC, E <u>O9UKV3</u> Human, Mouse Rabbit Polyclonal 152kDa KDa WB~~1:1000 IHC-P~~N/A IF~~1:50~200 ICC~~N/A E~~N/A

ACIN1 / Acinus Antibody (aa775-789) - Additional Information

Gene ID 22985

Other Names Apoptotic chromatin condensation inducer in the nucleus, Acinus, ACIN1, ACINUS, KIAA0670

Target/Specificity

peptide (dtsenrpendvpepp) corresponding to amino acids 775 to 789 of human AcinusL, 48 to 62 of human AcinusS, or 17 to 31 of human AcinusS, which differ from those of mouse Acinus by one amino acid

Reconstitution & Storage Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

Precautions ACIN1 / Acinus Antibody (aa775-789) is for research use only and not for use in diagnostic or therapeutic procedures.

ACIN1 / Acinus Antibody (aa775-789) - Protein Information

Name ACIN1

Synonyms ACINUS, KIAA0670

Function

Auxiliary component of the splicing-dependent multiprotein exon junction complex (EJC) deposited at splice junction on mRNAs. The EJC is a dynamic structure consisting of core proteins and several peripheral nuclear and cytoplasmic associated factors that join the complex only transiently either during EJC assembly or during subsequent mRNA metabolism. Component of the ASAP complexes



which bind RNA in a sequence-independent manner and are proposed to be recruited to the EJC prior to or during the splicing process and to regulate specific excision of introns in specific transcription subsets; ACIN1 confers RNA-binding to the complex. The ASAP complex can inhibit RNA processing during in vitro splicing reactions. The ASAP complex promotes apoptosis and is disassembled after induction of apoptosis. Involved in the splicing modulation of BCL2L1/Bcl-X (and probably other apoptotic genes); specifically inhibits formation of proapoptotic isoforms such as Bcl-X(S); the activity is different from the established EJC assembly and function. Induces apoptotic chromatin condensation after activation by CASP3. Regulates cyclin A1, but not cyclin A2, expression in leukemia cells.

Cellular Location

Nucleus. Nucleus speckle. Nucleus, nucleoplasm. Note=Phosphorylation on Ser-1180 by SRPK2 redistributes it from the nuclear speckles to the nucleoplasm

Tissue Location

Ubiquitous. The Ser-1180 phosphorylated form (by SRPK2) is highly expressed and phosphorylated in patients with myeloid hematologic malignancies

ACIN1 / Acinus Antibody (aa775-789) - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

ACIN1 / Acinus Antibody (aa775-789) - Images



Immunofluorescence of Acinus in K562 cells with Acinus antibody at 20 ug/ml.





Anti-ACIN1 / Acinus antibody IHC of human adrenal.



Anti-ACIN1 / Acinus antibody IHC of human pancreas.



Anti-ACIN1 / Acinus antibody IHC of human testis.



Immunocytochemistry of Acinus in K562 cells with Acinus antibody at 5 µg/ml. ACIN1 / Acinus Antibody (aa775-789) - Background



Auxiliary component of the splicing-dependent multiprotein exon junction complex (EJC) deposited at splice junction on mRNAs. The EJC is a dynamic structure consisting of core proteins and several peripheral nuclear and cytoplasmic associated factors that join the complex only transiently either during EJC assembly or during subsequent mRNA metabolism. Component of the ASAP complexes which bind RNA in a sequence- independent manner and are proposed to be recruited to the EJC prior to or during the splicing process and to regulate specific excision of introns in specific transcription subsets; ACIN1 confers RNA-binding to the complex. The ASAP complex can inhibit RNA processing during in vitro splicing reactions. The ASAP complex promotes apoptosis and is disassembled after induction of apoptosis. Involved in the splicing modulation of BCL2L1/Bcl-X (and probably other apoptotic genes); specifically inhibits formation of proapoptotic isoforms such as Bcl-X(S); the activity is different from the established EJC assembly and function. Induces apoptotic chromatin condensation after activation by CASP3. Regulates cyclin A1, but not cyclin A2, expression in leukemia cells.

ACIN1 / Acinus Antibody (aa775-789) - References

Sahara S.,et al.Nature 401:168-173(1999). Li W.B.,et al.Submitted (FEB-2003) to the EMBL/GenBank/DDBJ databases. Heilig R.,et al.Nature 421:601-607(2003). Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases. Ishikawa K.,et al.DNA Res. 5:169-176(1998).