

Acinus Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54182

Specification

Acinus Polyclonal Antibody - Product Information

Application IHC-P, IHC-F, IF, E

Primary Accession <u>Q9UKV3</u>

Reactivity
Host
Clonality
Calculated MW
Physical State

Rat, Dog, Bovine
Rabbit
Polyclonal
148 KDa
Liquid

Immunogen KLH conjugated synthetic peptide derived

from human Acinus

501-600/1341

IgG

Epitope Specificity

Isotype **Purity**

affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Nucleus. Nucleus speckle. Nucleus,

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

SIMILARITY Contains 1 SAP domain.

SUBUNIT Found in a mRNA splicing-dependent exon junction complex (EJC), at least composed

of ACIN1, CASC3, EIF4A3, MAGOH, PNN, RBM8A, RNPS1, SAP18 and ALYREF/THOC4. Forms heterodimers with RNPS1. Found in a heterotrimeric complex with ACIN1, RNPS1 and SAP18. Interacts with API5.

Interacts with SRPK2 in a

Post-translational modifications phosphorylation-dependent manner.
Phosphorylation on Ser-1180 by SRPK2

up-regulates its stimulatory effect on cyclin A1. Undergoes proteolytic cleavage; the processed form is active, contrary to

the uncleaved form.

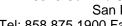
Important Note

This product as supplied is intended for research use only, not for use in human,

therapeutic or diagnostic applications.

Background Descriptions

Chromatin condensation and nuclear fragmentation (CCNF) are the hallmarks of apoptosis. CCNF is triggered by the activation of members of the caspase family, caspase activated DNase (CAD/DFF40), and several novel proteins including AIF and CIDE. A new inducer of chromatin condensation was recently identified and designated Acinus (for apoptotic chromatin condensation inducer in the nucleus). Acinus is cleaved by Caspase 3 and an additional unknown protease generating a small active peptide p17, which causes chromatin condensation in vitro when it is





added to purified nuclei. Acinus also induces apoptotic chromatin condensation in cells. Acinus is ubiquitously expressed. Three different spliced forms of Acinus have been identified in human and mouse and designated Acinus L (1341 amino acids), Acinus S (583 amino acids) and Acinus S' (614 amino acids)

Acinus Polyclonal Antibody - Additional Information

Gene ID 22985

Other Names

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

Target/Specificity

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

Dilution

```
<span class ="dilution IHC-P">IHC-P~~N/A</span><br \><span class</pre>
="dilution IHC-F">IHC-F~~N/A</span><br \><span class
="dilution IF">IF~\sim 1:50\sim 200</span><br/>or \><span class ="dilution <math>E">E\sim N/A</span>
```

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Acinus Polyclonal Antibody - Protein Information

Name ACIN1

Synonyms ACINUS, KIAA0670

Function

Auxiliary component of the splicing-dependent multiprotein exon junction complex (EIC) deposited at splice junction on mRNAs. The EIC 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

Acinus Polyclonal Antibody - Protocols

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

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

Acinus Polyclonal Antibody - Images