

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	Q9UKV3
Reactivity	Rat, Dog, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	148 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Acinus
Epitope Specificity	501-600/1341
Isotype	IgG
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. Contains 1 SAP domain.
SIMILARITY	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.
SUBUNIT	Forms heterodimers with RNPS1. Found in a heterotrimeric complex with ACIN1, RNPS1 and SAP18. Interacts with API5. Interacts with SRPK2 in a phosphorylation-dependent manner.
Post-translational modifications	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

IHC-P ~ ~ N/A
IHC-F ~ ~ N/A
IF ~ ~ 1:50 ~ 200
E ~ ~ N/A

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 (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

Acinus Polyclonal Antibody - 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](#)

Acinus Polyclonal Antibody - Images