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# Acinus Antibody

Catalog # ASC10095

## Product Information

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| **Application** | WB, E |
| **Primary Accession** | Q9UKV3 |
| **Other Accession** | AAD56724, 5931959 |
| **Reactivity** | Human |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | IgG |
| **Calculated MW** | 151862 |
| **Conjugate** | Unconjugated |
| **Application Notes** | Acinus antibody can be used for detection of acinus by Western blot at 1 g/mL. An approximate 220 kDa band can be detected. |

## Additional Information

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| **Gene ID** | 22985 |
| **Other Names** | Acinus Antibody: ACN, ACINUS, fSAP152, KIAA0670, Apoptotic chromatin condensation inducer in the nucleus, Acinus, apoptotic chromatin condensation inducer 1 |
| **Target/Specificity** | ACIN1; |
| **Reconstitution & Storage** | Acinus antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures. |
| **Precautions** | Acinus Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **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; |

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| | 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 |

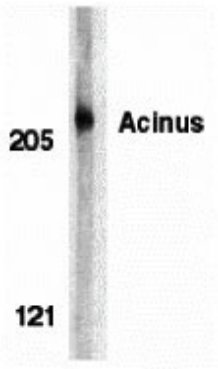
## Background

Acinus Antibody: Chromatin condensation and nuclear fragmentation (CCNF) is the hallmark of apoptosis. CCNF is triggered by the activation of members of 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 AcinusL, AcinusS and AcinusS'.

## References

Zamzami N, Kroemer G. Condensed matter in cell death. Nature 1999 ;401:127-8.
Sahara S, Aoto M, Eguchi Y, Imamoto N, Yoneda Y, Tsujimoto Y. Acinus is a caspase-3-activated protein required for apoptotic chromatin condensation. Nature 1999 401:168-73.

## Images




Western blot analysis of acinus in K562 whole cell lysate with acinus antibody at 1 µg/mL.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.