

Rabbit Anti-Acinus antibody

SL0120R

Product Name	Acinus
Chinese Name	Acinus 抗体
Alias	ACIN 1; ACIN1; ACINU_HUMAN; Acinus; ACN; Apoptotic chromatin condensation inducer 1; Apoptotic chromatin condensation inducer in the nucleus; DKFZp667N107; fSAP152; functional spliceosome-associated protein 152; KIAA0670.
Research Area	Cell biology Neurobiology Signal transduction Apoptosis
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	(predicted: Human, Mouse, Rat, Dog, Cow, Horse,) IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000 (Paraffin sections need antigen repair)
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	148kDa
Cellular localization	The nucleus
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human Acinus: 501-600/1341
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
PubMed	PubMed
Product Detail	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/DFP40), 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)

Function:

Component of a splicing-dependent multiprotein exon junction complex (EJC) deposited at splice junction on mRNAs. The EJC is a dynamic structure consisting of a few core proteins and several more peripheral nuclear and cytoplasmic associated factors that join the complex only transiently either during EJC assembly or during subsequent mRNA metabolism. Induces apoptotic chromatin condensation after activation by CASP3. Regulates cyclin A1, but not cyclin A2, expression in leukemia cells.

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 phosphorylation-dependent manner.

Subcellular Location:

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

Tissue Specificity:

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

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.



Similarity:

Contains 1 SAP domain.

SWISS:

Q9UKV3

Gene ID:

22985

Database links:

[Entrez Gene: 22985](#) Human

[Omid: 604562](#) Human

[SwissProt: Q9UKV3](#) Human

[Unigene: 124490](#) Human