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#4934

## Acinus Antibody

**For Research Use Only. Not for Use in Diagnostic Procedures.**

<b>Applications:</b> W, IF-IC	<b>Reactivity:</b> H M R Mk	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 220, 84, 86	<b>Source/Isotype:</b> Rabbit	<b>UniProt ID:</b> #Q9UKV3	<b>Entrez-Gene Id:</b> 22985
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### Product Usage Information

#### Application

Western Blotting  
Immunofluorescence (Immunocytochemistry)

#### Dilution

1:1000  
1:50

### Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

### Specificity/Sensitivity

Acinus Antibody detects endogenous levels of total Acinus protein. The antibody recognizes L, S and S' isoforms.

### Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ala835 of Acinus. Antibodies are purified by protein A and peptide affinity chromatography.

### Background

Acinus (apoptotic chromatin condensation inducer in the nucleus) is a caspase substrate that has been implicated in nuclear changes during apoptosis (1). Chromatin condensation and DNA fragmentation are both nuclear morphological features associated with apoptosis. Acinus is expressed in different isoforms (L, S, S') most likely generated by alternative splicing (1). During apoptosis Acinus is cleaved by caspase-3 to generate a 23 kDa fragment that was reported to induce chromatin condensation (1). Acinus has been identified to be a component of the spliceosome complex, ASAP, suggesting a role in pre-mRNA processing (2-4). Down regulation of Acinus by RNA interference inhibits cell growth (5). This study also found that loss of Acinus inhibits DNA fragmentation but not chromatin condensation during apoptosis.

### Background References

1. Sahara, S. et al. (1999) *Nature* 401, 168-173.
2. Schwerk, C. et al. (2003) *Mol. Cell. Biol.* 23, 2981-2990.
3. Zhou, Z. et al. (2002) *Nature* 419, 182-185.
4. Rappsilber, J. et al. (2002) *Genome Res.* 12, 1231-1245.
5. Joselin, A.P. et al. (2006) *J. Biol. Chem.* 281, 12475-12484.

### Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

### Western Blot Buffer

**IMPORTANT:** For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween@ 20 at 4°C with gentle shaking, overnight.

### Applications Key

**W:** Western Blotting **IF-IC:** Immunofluorescence (Immunocytochemistry)

### Cross-Reactivity Key

**H:** Human **M:** Mouse **R:** Rat **Mk:** Monkey

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