

SUPPLEMENTARY

Figure S1. PCNA expression is suppressed in the liver of *grnA* morphants. The PCNA-positive signal, indicated by the brown nuclei (red arrows), was lower in MO-treated hepatocytes (B) compared with control hepatocytes (A). (C) The mean number of PCNA-stained cells in the controls or *grnA*-knockdown hepatocytes was calculated at 4 dpf. hpf, hours post-fertilization. Scale bars, 25 μ m.

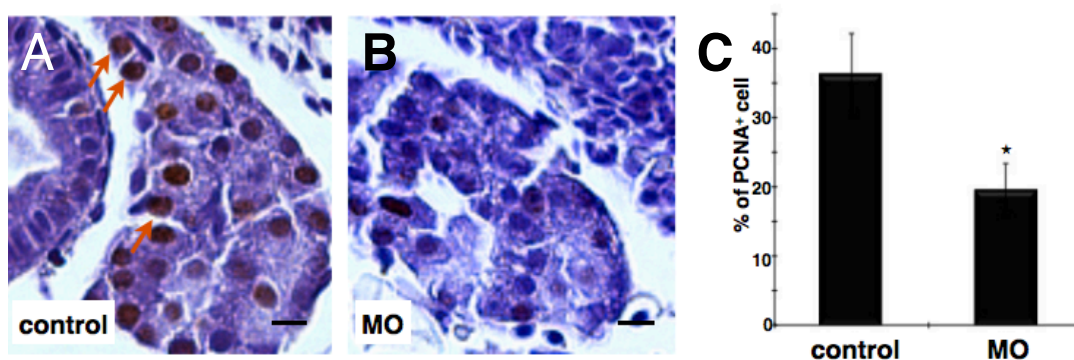


Table S1. Cellular pathways affected by knockdown of GrnA

Pathways	# of Measured Entities
Cell Cycle Regulation	233
Transcription factors	37
DNA replication	5
Ubiquitin-dependent protein degradation	20
Apoptosis Regulation	22
Translation Control	116
Chromatin remodeling	11
Focal Adhesion Regulation	17
Hedgehog Pathway	43
Notch Pathway	146