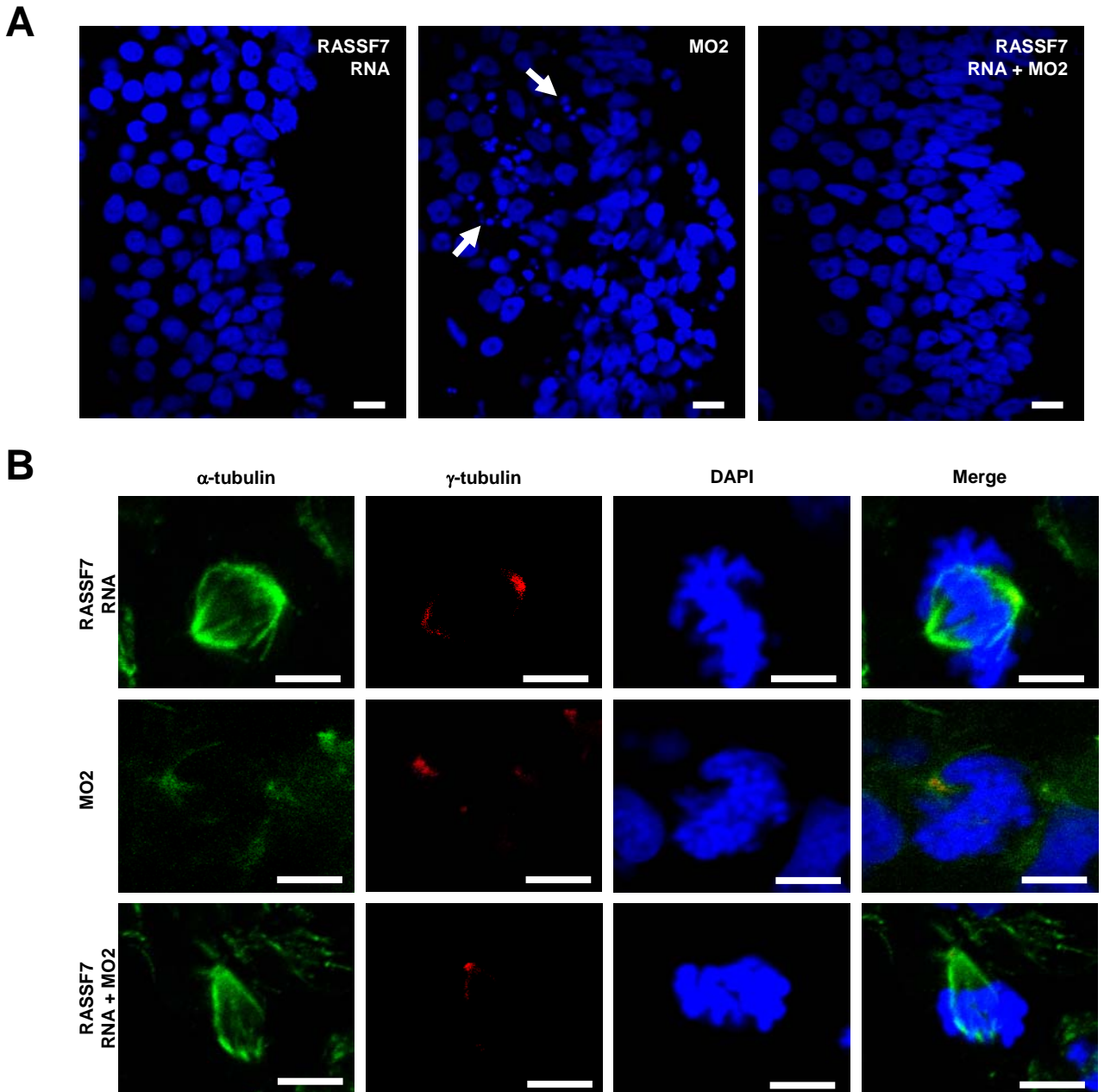


Supplementary Figure 1. Effects of RASSF7 knockdown on developing *Xenopus* tissues. DAPI staining of the eye and skin in MO injected embryos indicates that RASSF7 knockdown also leads to the production of nuclear fragments in these tissues. Compared to control tissue at stage 40, MO1 and MO2 developing eye and skin tissues exhibit nuclear fragmentation as highlighted by arrows. These tissues were found to express RASSF7 RNA by *in situ* hybridisation.



Supplementary Figure 2. RASSF7 RNA is capable of rescuing the phenotypic effects of RASSF7 knockdown. (A) Embryos injected with RASSF7 RNA and/or MO2 were fixed, sectioned and DAPI stained (blue) at stage 39. Arrows highlight nuclear fragments in the MO2 specimens, which are not present when MO2 is co-injected with RASSF7 RNA. (B) Mitotic progression of MO2 injected embryos is rescued in the presence of RASSF7 RNA. Mitotic progression was analysed in stage 39 tadpoles containing RASSF7 RNA and/or MO2 by staining with  $\alpha$ -tubulin (green),  $\gamma$ -tubulin (red) and DAPI (blue). Rescued specimens were able to form a mitotic spindle. All bars 10  $\mu$ m.