

Supplemental Figure S1. Transcriptional roles of ASCIZ. (A) Northern blot analysis of head extracts of 4 independent E14.5 embryos per genotype probed for *Asciz*, *Dynll1*, *Dlk1* and *Gapdh*. Note that this is the same membrane as shown in Supp. Fig. S1 of Jurado et al. (2010) reprobed for *Dynll1* and *Dlk1*. (C) Northern blot of E12.5 MEFs of 3 WT and 2 ASCIZ-deficient embryos probed for *Sprr2k* and *Gapdh*. Note that *Sprr2k* was not detectable on blots of the embryonic tissues shown in Fig. 2A (data not shown).



Supplemental Figure S2. ASCIZ-DYNLL1 protein interactions. **(A)** Regulation of DNA damageinduced ASCIZ focus formation by DYNLL1. Manual confirmation of the robotic siRNA screen shown in Fig. 3A. GFP-ASCIZ-667 expressing U2OS cells (McNees et al., 2005) were transfected with non-targeting siRNA siNT#2 or the *Dynll1* siGenome SMARTpool (Dharmacon) before treatment with 0.025% MMS for 4 hours. **(B)** Validation of the *Dynll1* siGenome SMARTpool. MMS-induced GFP-ASCIZ-667 focus formation of U2OS cells treated with siNT#2 or the 4 individual *Dynll1* siRNAs contained in the SMARTpool as indicated. **(C)** Alignment of human, mouse and zebrafish ASCIZ. Conserved TQT motifs are highlighted in red, and an additional TQT motif in zebrafish is indicated in blue. Note that the conserved TQT motifs are also present in chicken ASCIZ.