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Supplementary Information for

Cytokinesis and postabscission midbody remnants are regulated during mammalian brain development

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Figures S1

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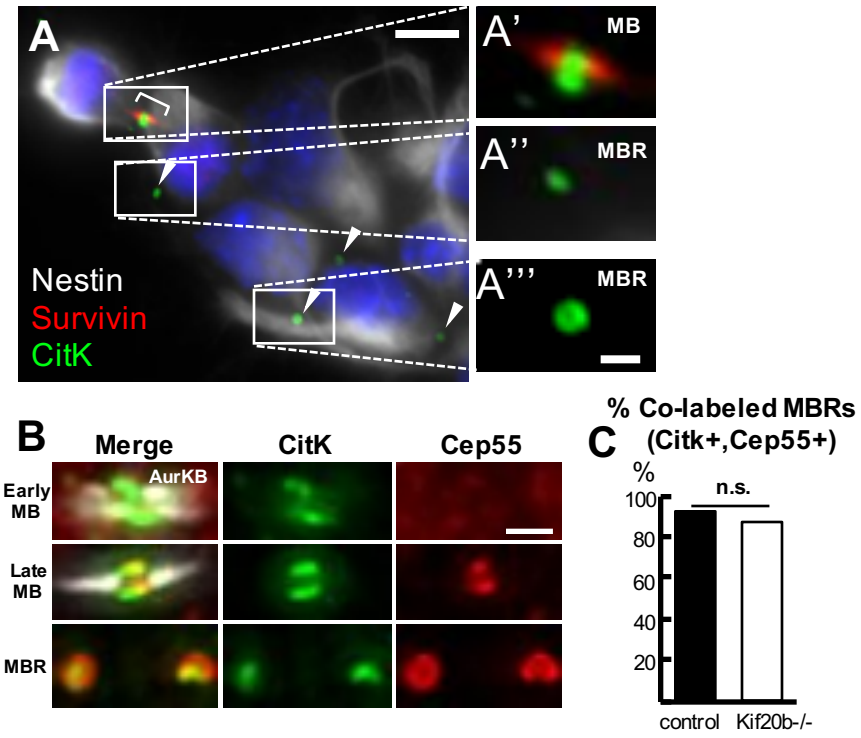

Supplemental Figure 1: NSC midbody remnants (MBRs) retain central bulge (marked by CitK or Cep55), but not midbody flanks (marked by Survivin or AurKB).

(A) Preabscission midbodies (bracket, MB) can be distinguished from post-abscission midbody remnants (arrowheads, MBRs) on NSCs. Dissociated E12.5 NSCs are identified by endogenous staining for Nestin. In preabscission midbodies, Citron kinase (CitK) appears as a ring within the central bulge (A'), while Survivin labels surrounding midbody flanks in a daughter pair still connected by a pre-abscission midbody (A'). CitK is also retained in post-abscission MBRs (A'', A'''(1, 2)).

(B) Images of dissociated E11.5 NSCs immunostained for endogenous CitK, Cep55, and AurKB show their distinct localizations at different midbody maturation stages. AurKB localizes to the flanks of early and late midbodies, but is mostly absent in postabscission MBRs. CitK localizes as a ring in the central bulge of early and late midbodies as well as MBRs. Cep55 is absent in early midbodies, but accumulates in a ring at the midbody central bulge, but only at late stages, and remains in MBRs (3-5).

(C) MBRs of NSCs can be detected with either CitK or Cep55 immunostaining, as the vast majority of MBRs are labeled strongly by both markers.

Scalebars: 5 μm in A; 1 μm in A', A"", and B.

n= 61 control MBR (1 brain), 49 *Kif20b-/-* MBR (1 brain) For C: n.s, not significant (Fisher's exact test).

References

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