

Supplemental Movies



Movie 1: Time-lapse movie of a mock RNAi-treated HMR-1::GFP embryo at the second cell division, DIC channel. Embryo was imaged under pressure-free, isosmotic conditions. Images were taken every 30 seconds.



Movie 2: Time-lapse movie of a mock RNAi-treated HMR-1::GFP embryo at the second cell division, GFP channel. Embryo was imaged under pressure-free, isosmotic conditions. Images were taken every 30 seconds.



Movie 3: Time-lapse movie of a *ribo-1*(RNAi)-treated HMR-1::GFP embryo at the second cell division, DIC channel. Embryo was imaged under pressure-free, isosmotic conditions. Images were taken every 30 seconds.



Movie 4: Time-lapse movie of a ribo-1(RNAi)-treated HMR-1::GFP embryo at the second cell division, GFP channel. Embryo was imaged under pressure-free, isosmotic conditions. Images were taken every 30 seconds.



Movie 5: Time-lapse movie of a ribo-1(RNAi)-treated HMR-1::GFP embryo at the second cell division, DIC channel. Embryo was imaged under pressure-free, isosmotic conditions. Images were taken every 30 seconds.



Movie 6: Time-lapse movie of a ribo-1(RNAi)-treated HMR-1::GFP embryo at the second cell division, GFP channel. Embryo was imaged under pressure-free, isosmotic conditions. Images were taken every 30 seconds.



Movie 7: Z-stack of the ribo-1(RNAi)-treated HMR-1::GFP embryo shown in movies 5 and 6, DIC channel.
Embryo was imaged under pressure-free, isosmotic conditions. Distance between Z planes is 1 μm .



Movie 8: Z-stack of the ribo-1(RNAi)-treated HMR-1::GFP embryo shown in movies 5 and 6, GFP channel. Embryo was imaged under pressure-free, isosmotic conditions. Distance between Z planes is 1 μm .

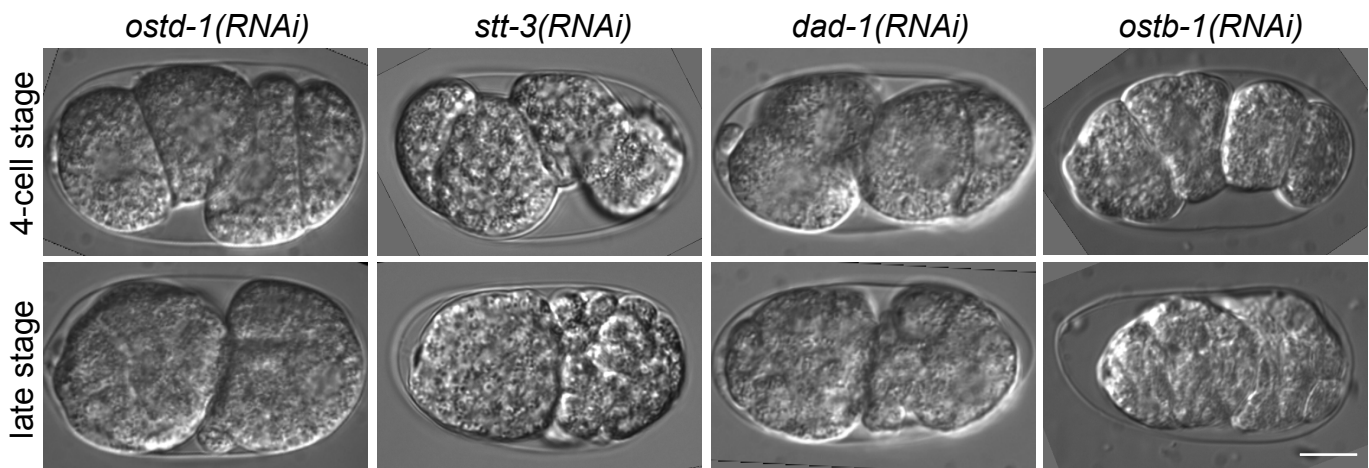


Fig. S1

Knockdown of other OST genes leads to similar phenotypes as *ribo-1(RNAi)*.

DIC images of live embryos taken under pressure-free conditions show the adhesion defect at the 4-cell and multicellular stage. Scalebar: 10 μ m.

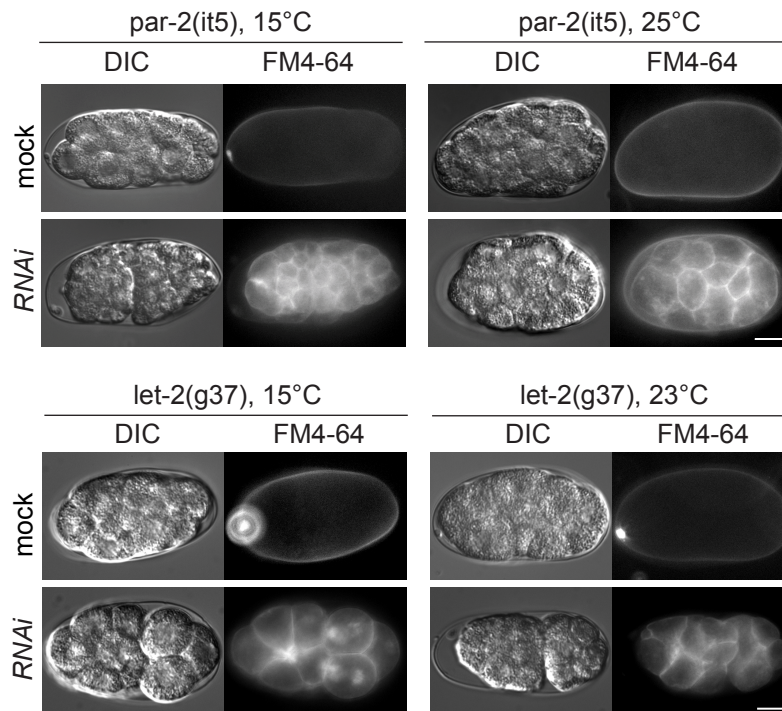


Fig. S2 Examples of multicellular embryos of *ribo-1(RNAi)* treated *ts*-mutants.

The cleft is visible in *par-2(it5)* only at permissive temperature, while in *let-2(g37)* embryos are clefted irrespective of the temperature.

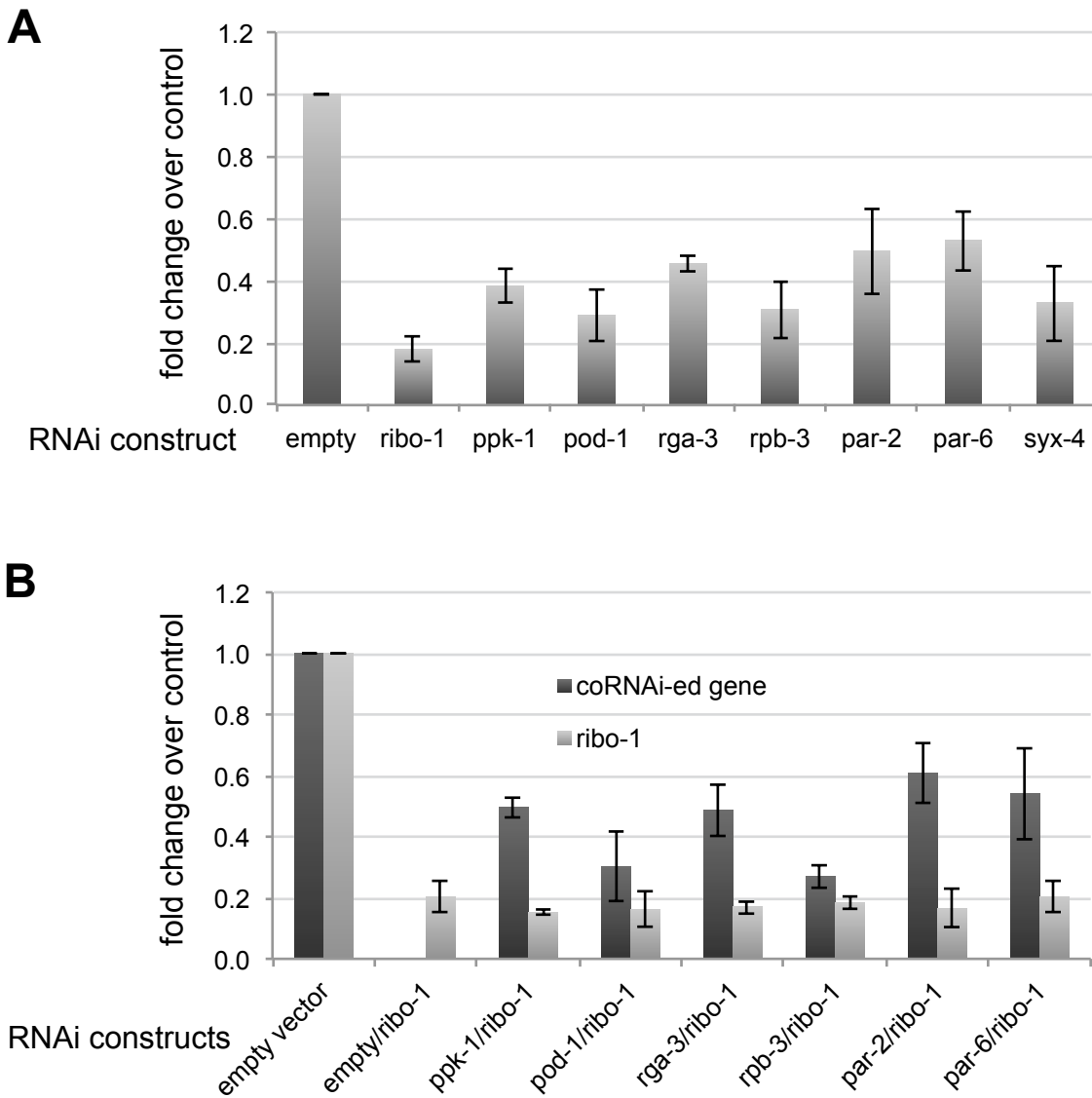


Fig. S3: qPCR verification of the knockdown efficiencies in single (A) and double (B) RNAi feedings. Total RNA was isolated from adult worms after 36 hours of feeding, the mRNA was reverse transcribed using oligo(dT)15-primers. qPCR was performed using specific primers for the genes of interest, and their levels were analyzed relative to their level in the mock RNAi sample.

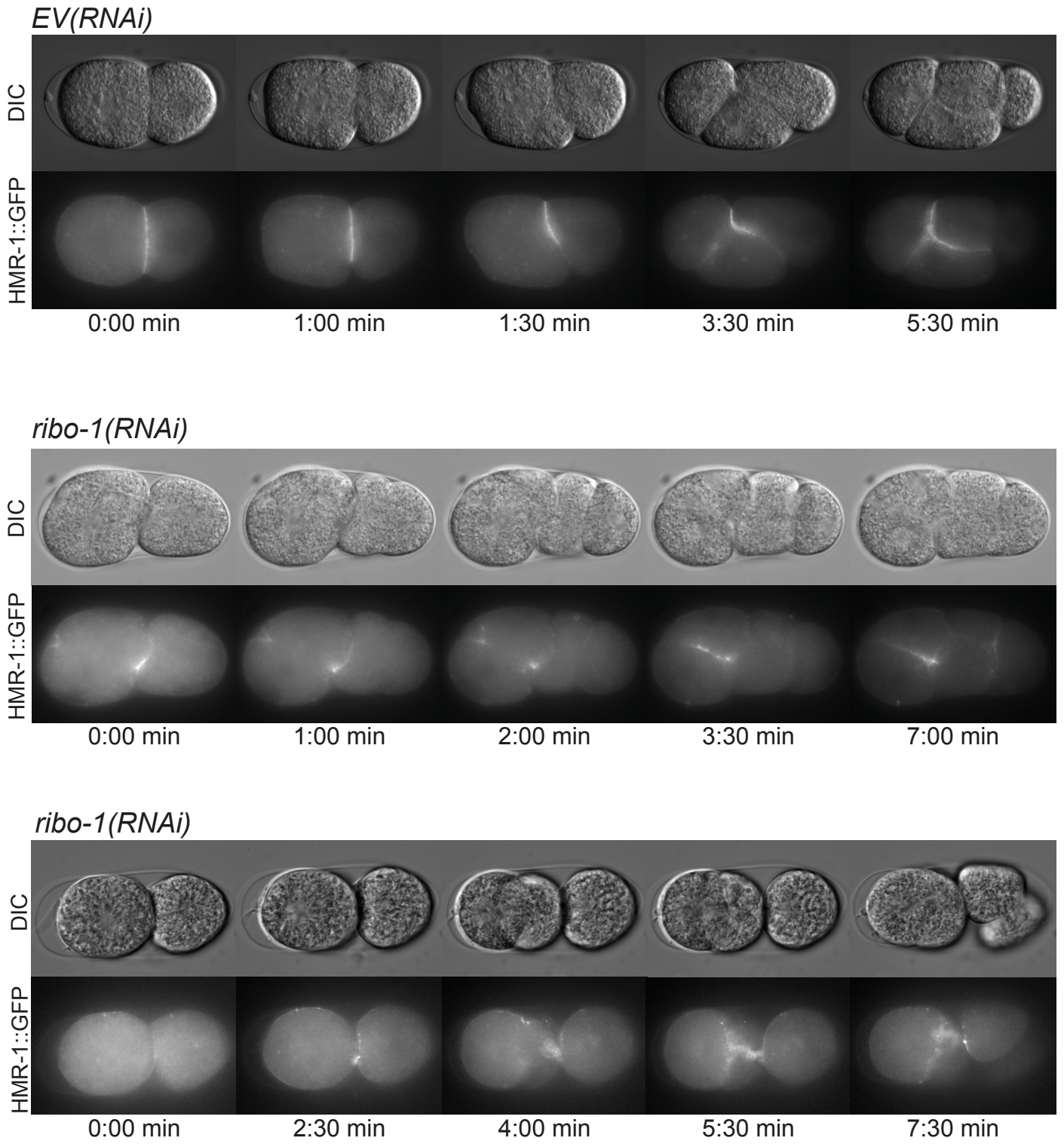


Fig. S4: Stills from time-lapse movies of HMR-1::GFP expressing embryos at the second cell division. Embryos were imaged under pressure-free, isosmotic conditions. Images were taken every 30 seconds.