Supplementary Figure and Movie Legends

Supplementary Fig. 1. Anti-UNC-78 antibody specifically recognizes the UNC-78 protein in the somatic gonad. Dissected gonads from wild-type (A, C, E, G, I, and K) or *unc-78(null)* worms (B, D, F, H, J, and L) were fixed and stained with anti-UNC-78 antibody (A, B, G, and H) and DAPI (C, D, I, and J). Merged images are shown in E, F, K, and L (red: anti-UNC-78 antibody; blue: DAPI). Regions of the ovary (myoepithelial sheath and oocytes) (A-F) and the spermatheca (G-L) are shown. For comparison between wild-type and *unc-78(null)*, equivalent exposure settings were used for micrographs of anti-UNC-78 for these samples. For anti-UNC-78 antibody staining of wild-type ovary (A), focus of the micrograph was adjusted at the level of oocytes (indicated by asterisks in A), and the myoepithelial sheath was visible at the edges of the ovary (indicated by arrows in A). Bars, 10 μm.

Supplemental Movie 1. An ovulation process in a wild-type worm.

Supplemental Movie 2. An ovulation process in an *aipl-1(null)* worm.

Supplemental Movie 3. An ovulation process in an *unc-78(null)* worm with control RNAi.

Supplemental Movie 4. Ovulation failure in an *unc-78(null)* worm with *aipl-1(RNAi)*.

These supplemental movies are 40 times as fast as real time.