

Figure S1 Quantitative analysis of FBL-1C-Venus. Sample data for *fbl-1(tk45) Ex[fbl-1C::Venus]* are shown. For each sample, confocal images of the sagittal section of the gonads were obtained with a Zeiss Imager M2 microscope equipped with a spinning-disk confocal scan head (CSU-X1; Yokogawa) and an ImageEM CCD camera (ImageEM; Hamamatsu Photonics). Using ImageJ software, fluorescence intensities along three drawn lines, each of which crossed the basement membrane (A to C), were measured; the average background intensities inside the gonad (D) were subtracted from the peak values, and the resulting corrected values were averaged.



Figure S2 Quantification of gonadal localization of MIG-17-Venus and Venus-MIG-18. The strains in Figure 3A and C were used. Fluorescence intensities of gonadal basement membrane were analyzed with similar procedures as described in Figure S1. The vertical scale is given in arbitrary units. Each dot represents the fluorescence intensity of a single animal. The horizontal bars represent mean values. *P*-values for Fisher's exact test against WT are indicated.

WT Ex[mig-18p::SP::Venus::mig-18]



WT Ex[mig-18p:://SP::Venus::mig-18]



Figure S3 Expression of *mig-18p::ΔSP::Venus::mig-18*. A wild-type animal expressing *mig-18p::Venus::mig-18* (upper) exhibited fluorescent signals in both the body wall muscles (arrowhead) and the surface of the gonad (arrow). The wild-type animal expressing *mig-18p:: ΔSP::Venus::mig-18* (lower) exhibited signals only in the body wall muscles (arrowhead).



Figure S4 Expression of mig-24p::TM::Venus::mig-18. Fluorescence (left) and merged fluorescence and Nomarski (right) images of a

DTC in a young-adult hermaphrodite expressing *mig-24p::TM::Venus::mig-18* is shown.