

**Supplemental Figure 1.** GFP-UNC-78 with a quadruple mutation (E126A, D168A, F182A, and F192A) fails to rescue defects in the actin organization in the *unc-78(null)* mutant. Adult *unc-78(null)* worms that express GFP-UNC-78 were stained by tetramethylrhodamine-phalloidin to visualize organization of the actin filaments in the body wall muscle. Wild-type (A) or single mutants (B-F) rescued the striated organization of the actin filaments, while the 4X mutant did not (G). The *unc-78(null)* mutant without transgenic expression is shown in H. Bar, 20 μm.