LEGENDS TO SUPPLEMENTAL FIGURES

Fig S1. Localization of endogenous and exogenous Fhod3 in cultured rat cardiomyocytes. (A) Neonatal rat cardiomyocytes were double stained with antibodies against Fhod3 (red) and α-actinin (green). For endogenous Fhod3 staining, the anti-Fhod3(C-20) (upper panels) and the anti-Fhod3(873–974) (lower panels) polyclonal antibodies were used. Scale bar, 10 μm. (B and C) Neonatal rat cardiomyocytes transfected with the adenovirus encoding HA-tagged Fhod3 were stained with the antibodies against anti-HA (red) and α-actinin (green) in (B) or with the antibodies against anti-HA (red) and α-actinin (green), and with phalloidin (blue) in (C). Scale bars, 10 μm.

Fig S2. Effect of exogenous expression of Fhod3 in rat cardiomyocytes. (A and B) Cardiomyocytes transfected with the adenovirus encoding HA-tagged Fhod3 (A) or Fhod3S (B) were fixed and stained with the antibodies against anti-HA (red) and α-actinin (green). Scale bars, 10 μm. (C) Cardiomyocytes transfected with the adenovirus encoding HA-tagged Fhod3S were fixed and stained with the antibodies against anti-HA (red) and α-actinin (green), and with phalloidin (blue). Scale bars, 10 μm.

Fig S3. Fhod3 knock down disrupts sarcomere assembly in rat cardiomyocytes. Cardiomyocytes were transfected with Fhod3-specific siRNAs #1 and #4, and cultured for 48 hours. Cells were fixed and double stained with the antibodies against anti-Fhod3(650–802) (red) and α-actinin (green). Scale bar, 10 μm.

Fig S4. Cardiomyocytes were sequentially transfected with the adenovirus encoding the wild-type or mutant Fhod3 proteins and with Fhod3 siRNA #4 and cultured for 48 hours. Cells were fixed and double stained with the antibodies against anti-HA (red) and α-actinin (green), and with phalloidin (blue). Scale bar, 10 μm.

Fig S5. SDS-PAGE analysis of purified proteins that were used in an actin polymerization assay. Fhod3-ΔN(wt) (0.3 μg), Fhod3-ΔN(I1127A) (0.4 μg), and mDia1-FH1FH2 (1.2 μg) were subjected to 10% SDS-PAGE and stained with *Coomassie Brilliant Blue*. Positions for maker proteins are indicated in kDa.

Fig. S1 (Taniguchi *et al.*)

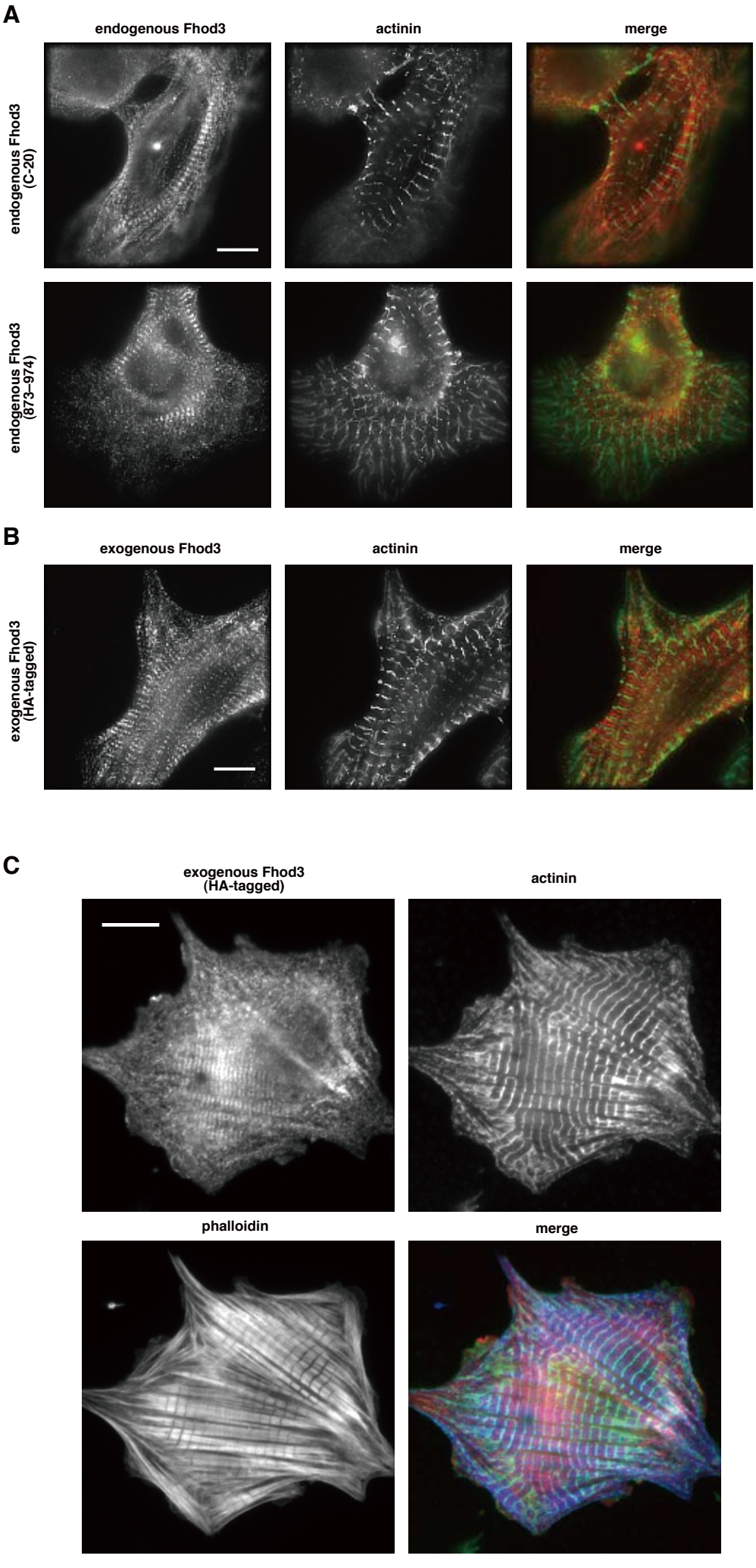

Fig. S2 (Taniguchi *et al.*)

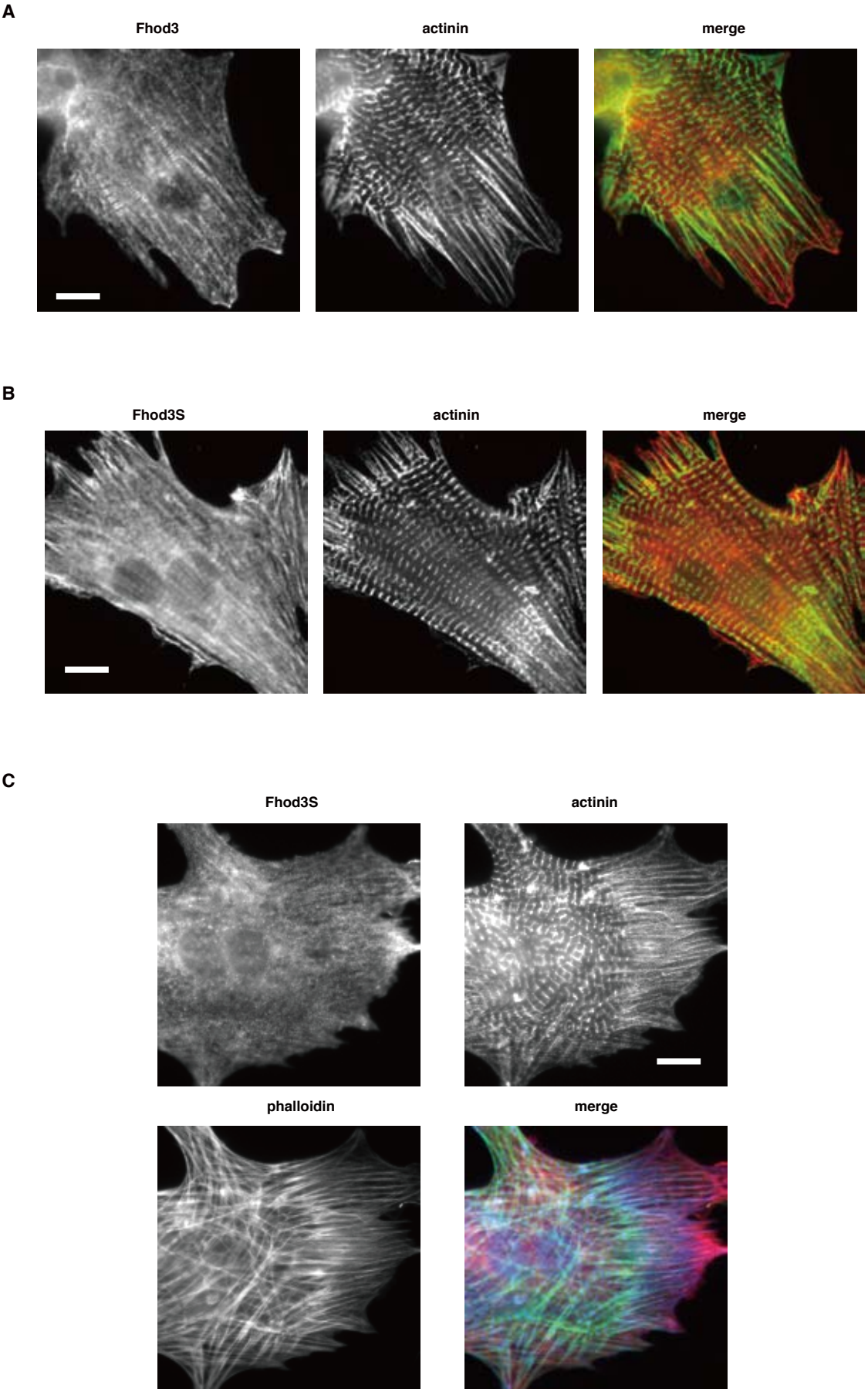

Fig. S3 (Taniguchi *et al.*)

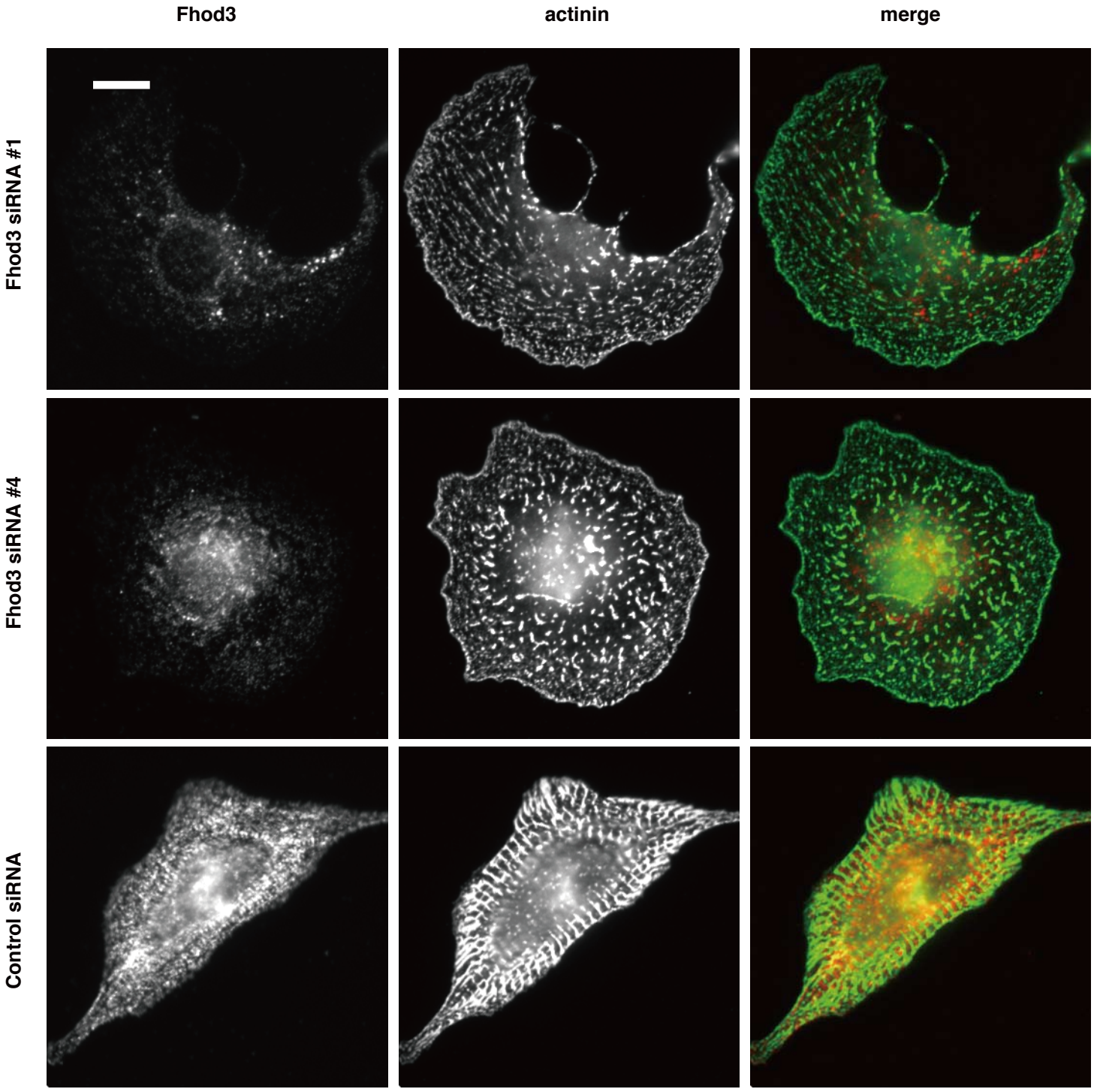

Fig. S4 (Taniguchi *et al.*)

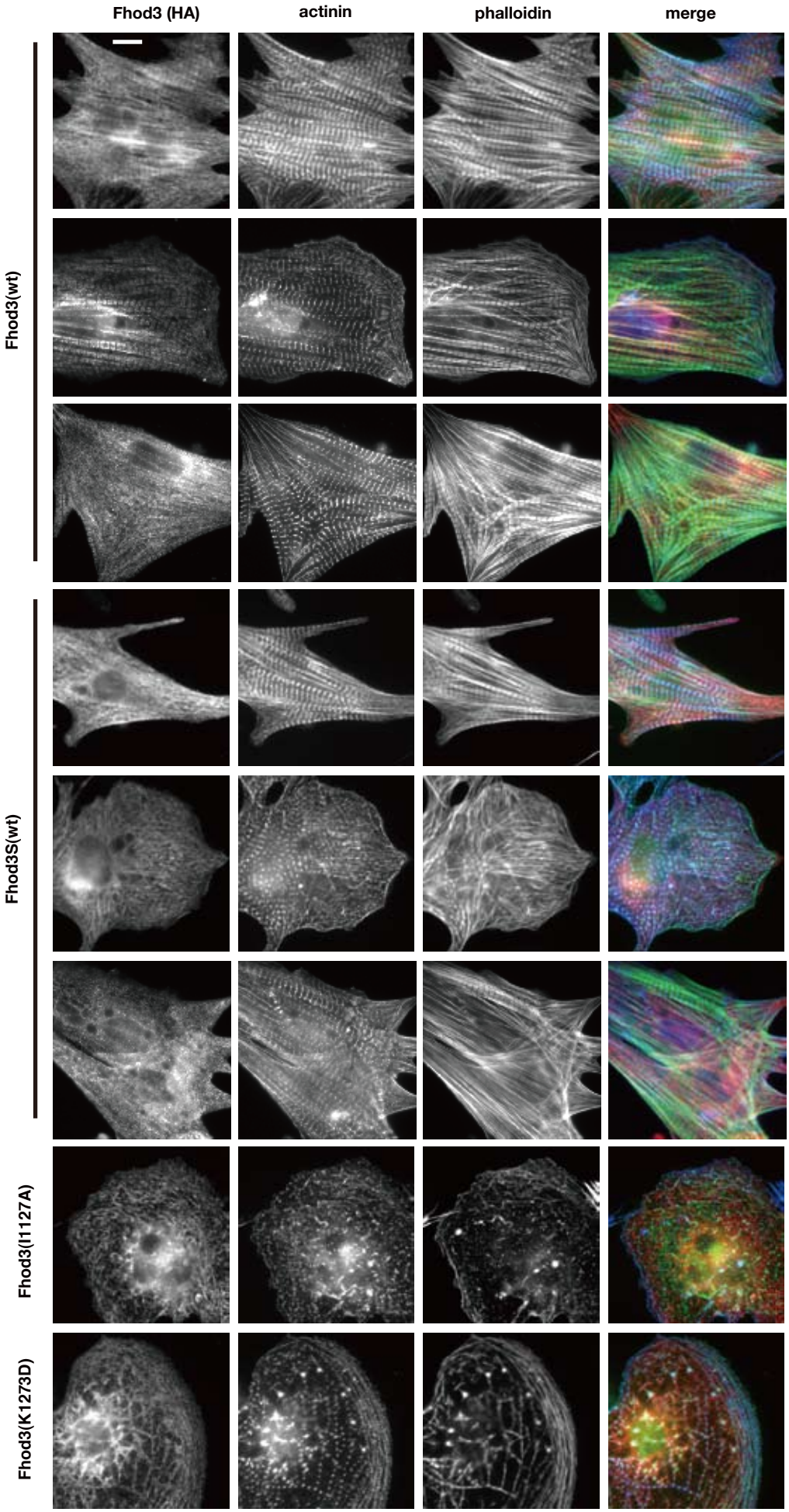

Fig. S5 (Taniguchi *et al.*)