Fig. S1

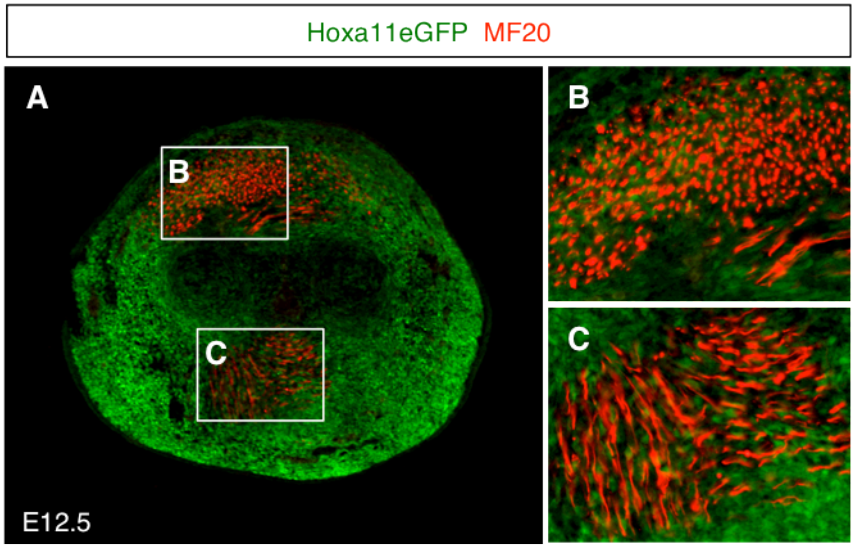

Fig. S1. Hoxa11eGFP is expressed in cells closely associated with muscle from the earliest stages of muscle patterning. Section through E12.5 Hoxa11eGFP (green) forelimb zeugopod stained with an antibody for muscle myosin (MF20, red).

Fig. S2

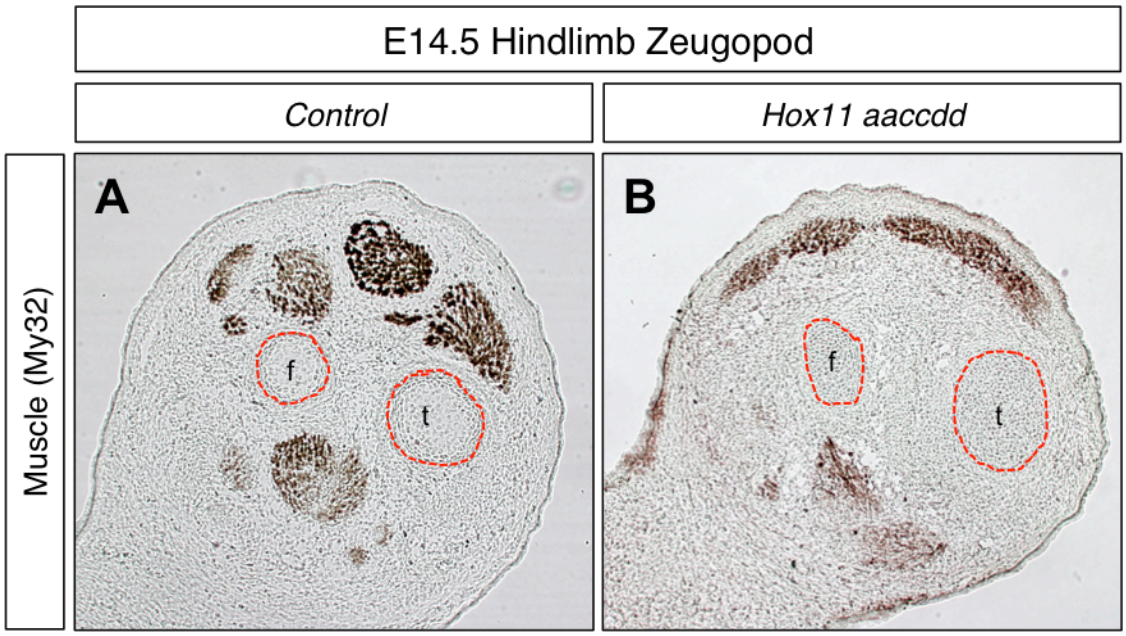

Fig. S2. Loss of *Hox11* function disrupts hindlimb zeugopod muscle patterning. Antibody staining for differentiated muscle (My32) in transverse sections through the zeugopod of control (A) and *Hox11* triple mutant (B) hindlimbs shows severe muscle patterning defects with the loss of *Hox11* paralogous gene function.

Fig. S3

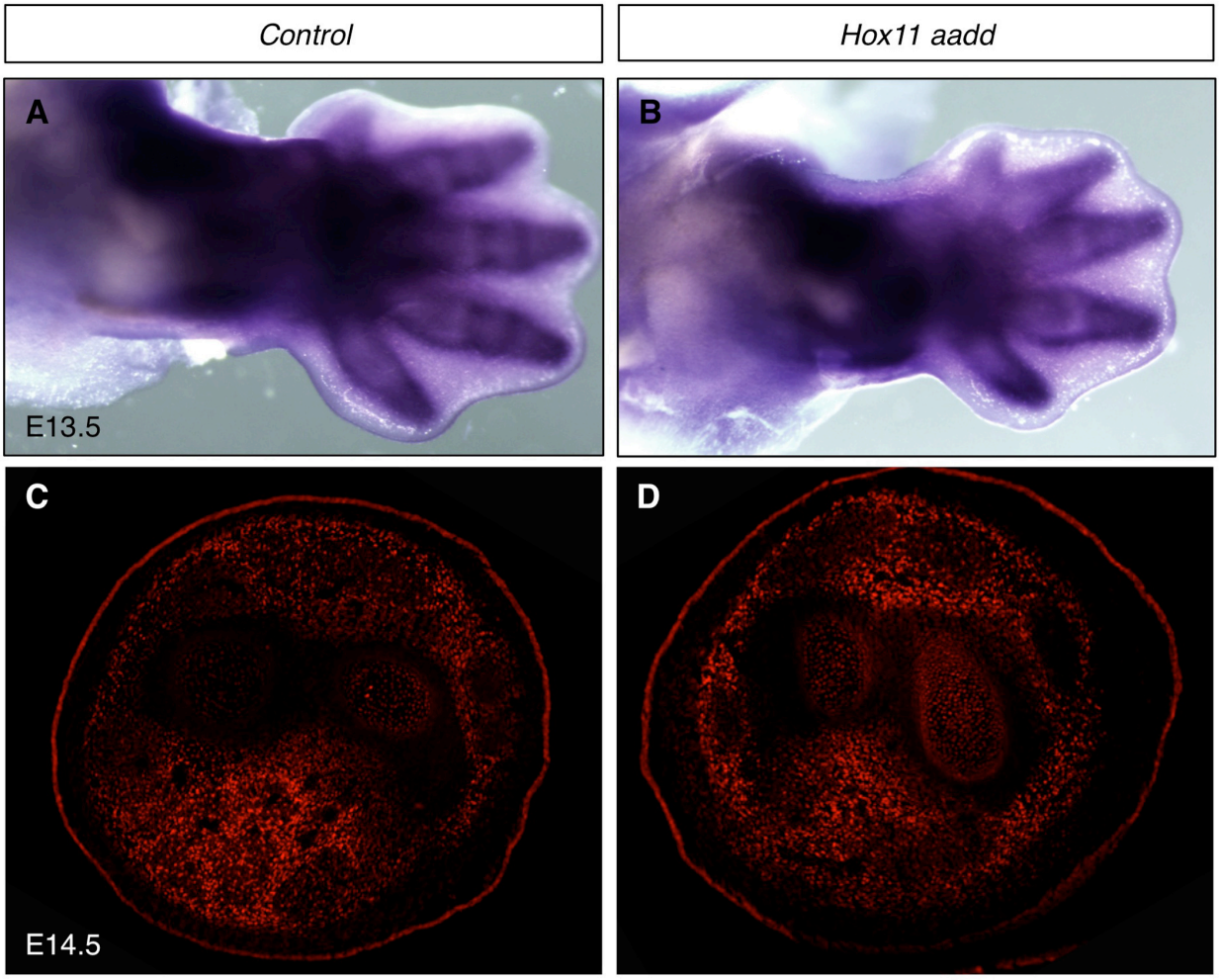

Fig. S3. *Tcf4* expression is maintained in muscle connective tissue of *Hox11* double mutant forelimbs. Whole mount in situ hybridization for *Tcf4* at E13.5 in control (A) and Hox11 double mutant forelimbs (B) shows that the pattern of *Tcf4* expression is indistinguishable. Antibody staining for Tcf4 at E14.5 on transverse sections through the zeugopod of control (C) and Hox11 double mutant embryos (D) shows similar Tcf4 expression levels between these two groups.

Fig. S4

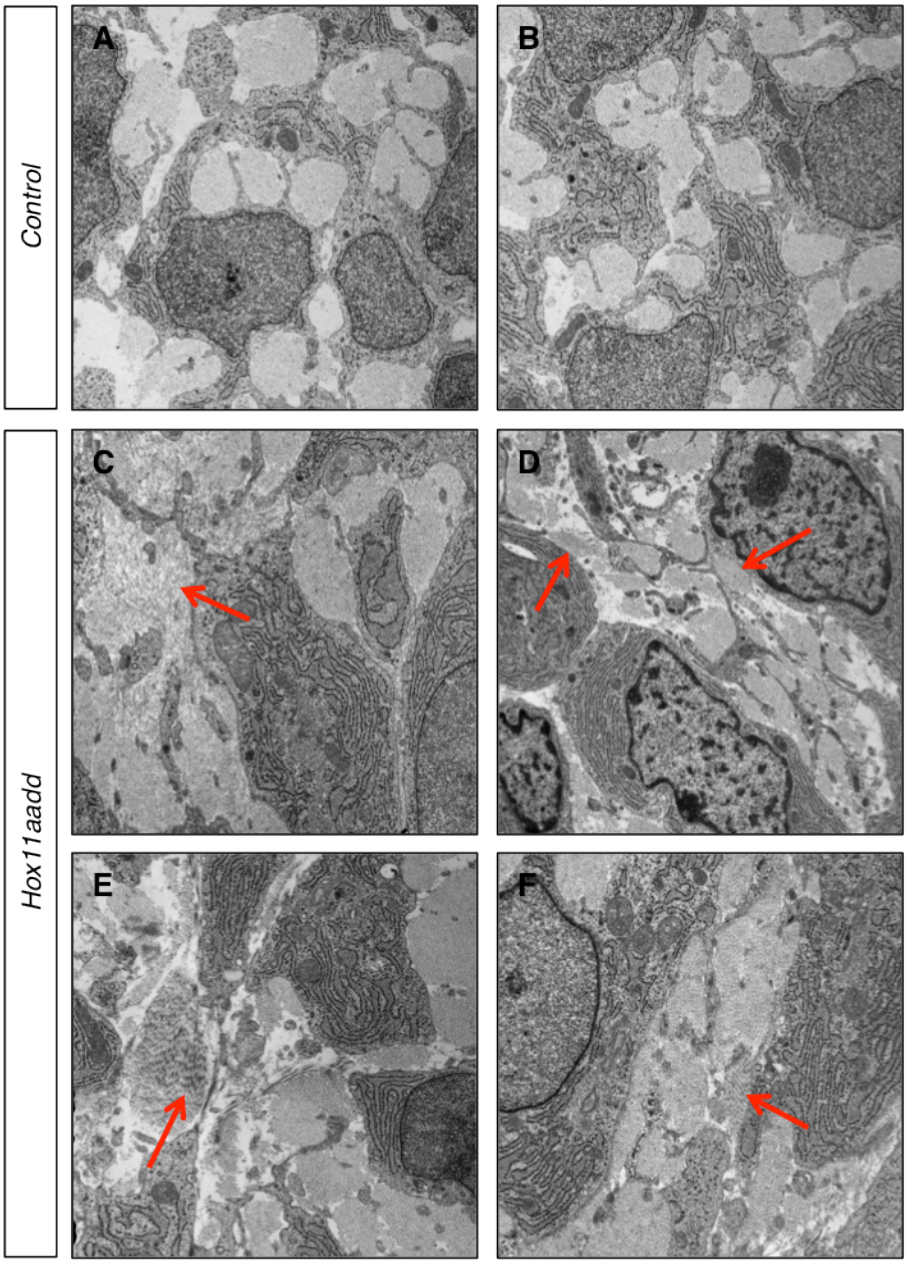

Fig. S4. Collagen fibrils are disorganized in *Hox11* mutant tendons. TEM of transverse sections through forelimb zeugopod tendons of control (A, B) and *Hox11* double mutant (C-F). Red arrows indicate areas in mutant where collagen fibrils run abnormally parallel to the plane of section.

Fig. S5

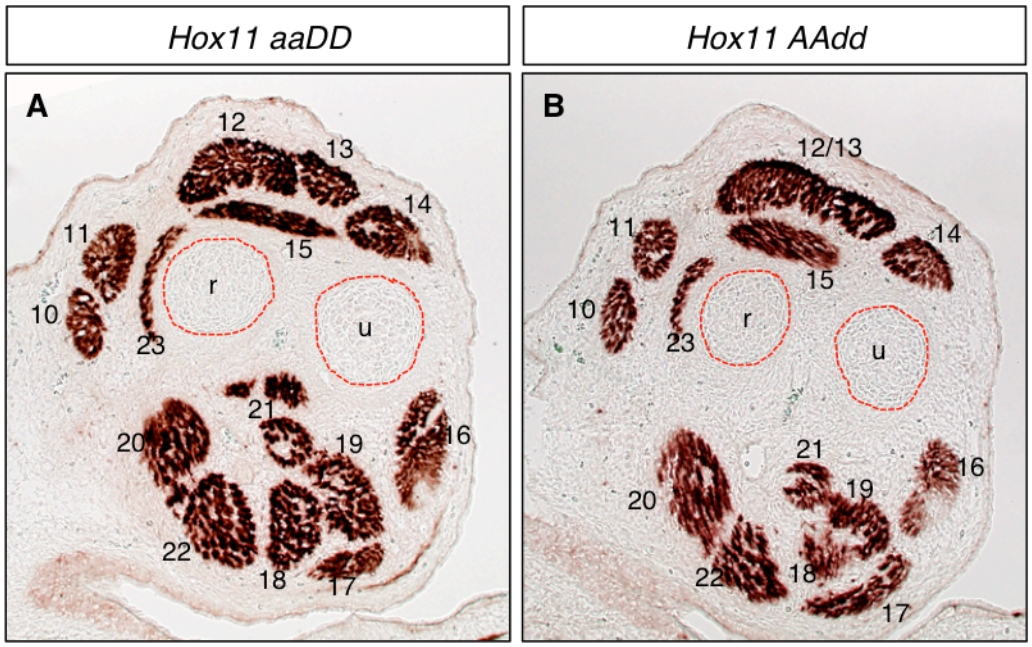

Fig. S5. Zeugopod muscle patterning of Hox11 single mutants. Antibody staining for differentiated muscle (My32) in transverse sections through the zeugopod of *Hoxa11*$^{-/-}$;*d11*$^{+/+}$ (A) and *Hoxa11*$^{+/+}$;*d11*$^{-/-}$ at E14.5. Muscle patterning of *Hox11* single mutant embryos is normal with the exception of a lack of separation between the extensor digitorum communis and lateralis in *Hoxd11* mutants (12/13).