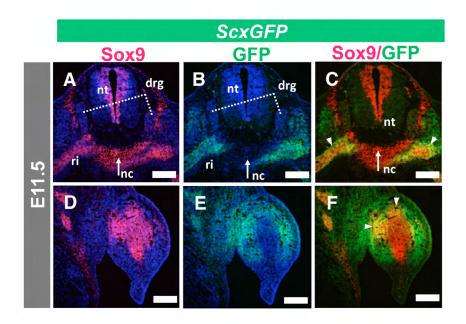


**Fig. S1.** Predominant distribution of  $Scx^+/Sox9^+$  cells around the primordial enthesis, the transitional zone from tendon/ ligament to cartilage. (A-G) *In situ* hybridization of Scx (A,D,E,G), Sox9 (B,F) and Myog (C). Frozen sagittal sections were prepared from wild-type embryos at E13.5 (A-F) and E16.5 (G). Expression of Scx, Sox9 or Myog is assessed in the forelimb (A-D) and hindlimb (E-G). An arrowhead in A indicates the expression of Scx at the myotendinous junction. Arrows in A,B indicate the insertion sites of tendons of triceps brachii muscles into the olecranon. Humerus and ulna are enclosed by the dotted line in C. Arrows in D indicate the  $Scx^+$  ligaments of the digit. Arrows in E,F indicate the  $Scx^+/Sox9^+$  epiphyseal regions. (G) Expression of Scx in the knee joint at E16.5; femur, tibia and patella are enclosed by the dotted line and the arrow indicates the cruciate ligament. ca, calcaneus; fe, femur; fi, fibula; hu, humerus; pa, patella; pl, patella ligament; qtf, quadriceps femoris tendon; ti, tibia; ul, ulna. Scale bars: 200 μm.



**Fig. S2. Distribution of Sox9**<sup>+</sup> and **Sox9**<sup>-</sup> cells in the Scx<sup>+</sup> region of *ScxGFP* mouse embryos at E11.5. In *ScxGFP* transgenic mouse embryos, Sox9<sup>+</sup> (red) and Scx<sup>+</sup> cells that are labeled by GFP (green) were detected by double immunostaining with antibodies specific for Sox9 and GFP, respectively; nuclei were stained with DAPI (blue). Merged images are presented in C,F. Transverse sections at the thoracic level (**A-C**) and of the forelimb (**D-F**) of an *ScxGFP* mouse are shown. Arrows in A-C indicate notochord. Arrowheads indicate the Scx<sup>+</sup>/Sox9<sup>+</sup> region in the proximal rib (C) and proximal forelimb (F). The dotted line in A,B indicates dorsal root ganglia. drg, dorsal root ganglion; nc, notochord; nt, neural tube; ri, rib. Scale bars: 200 μm.

Table S1. Tendon and ligament nomenclature used in this study

No.*	A/F <sup>‡</sup>	Nomenclature of tendons
T1		Thoracolumbar fascia (anterior layer)
T2	Α	Origin of longissimus muscle
T3	Α	Origin of latissimus dorsi muscle
T4		Thoracolumbar fascia
T5	Α	Origin of longissimus muscle
T6	Α	Origin of iliocostalis lumborum muscle
T7	Α	Origin of multifidi muscle
T8	F	Extensor digitorum longus tendon
T9	F	Achilles tendon
T10	F	Superficial digital flexor tendon
T11	Α	Origin of tibialis anterior muscle
T12	F	Quadriceps femoris tendon
T13	Α	Origin of supinator muscle
T14	Α	Common extensor tendon
T15	Α	Common extensor tendon
T16	Α	Origin of supinator muscle
T17	F	Extensor carpi ulnaris tendon
T18	F	(a) Extensor digiti quarti tendon
	F	(b) Extensor digiti quinti tendon
T19	F	Extensor digitorium communis tendon
T20	Α	Origin of extensor abductor muscle
T21	F	Extensor carpi radialis brevis tendon
T22	F	Extensor carpi radialis longus tendon
T23	F	Abductor pollicis tendon
T24	F	Flexor carpi radialis tendon
T25	F	Extensor indicis proprius tendon
T26	F	Flexor digitorium profundus tendon
T27	F	Flexor digitorium sublimis tendon
T28	F	Palmaris longus tendon
T29	F	Flexor carpi ulnaris tendon
T30	F	Interosseous

No.§	Nomenclature of ligaments	
L1	Facet joint capsule	
L2	Interspinal ligament	
L3	Collateral ligament of phalangeal joint	
L4	Patella ligament	
L5	Posterior cruciate ligament	
L6	Anterior cruciate ligament	
L7	Transverse ligament of knee	
L8	Antebrachial interossous membrane	
L9	Collateral ligament of metacarpophalangeal joint	

<sup>\*</sup>T1-T30 indicate tendons.

<sup>‡</sup>A or F indicates anchoring or force-transmitting tendons.

§L1-L9 indicate ligaments.