

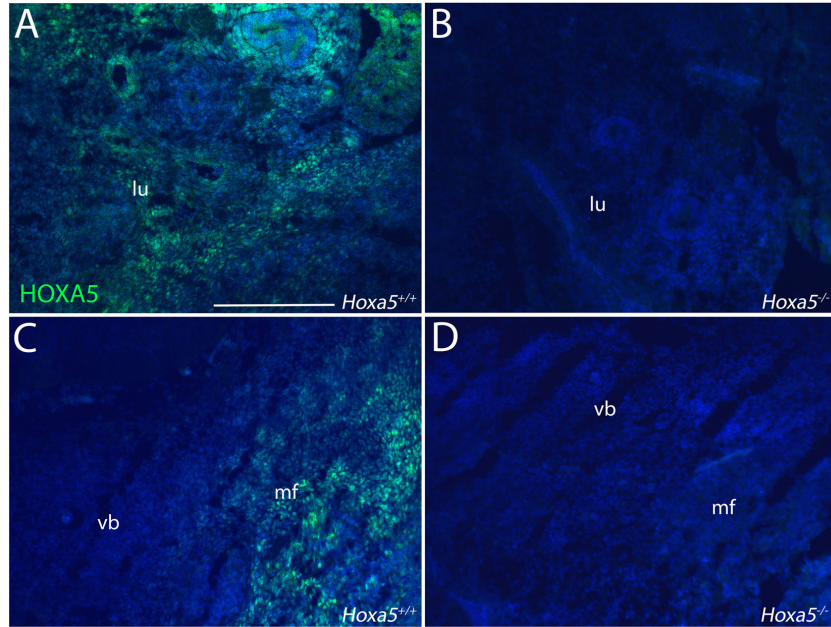
SUPPLEMENTARY MATERIAL

corresponding to:

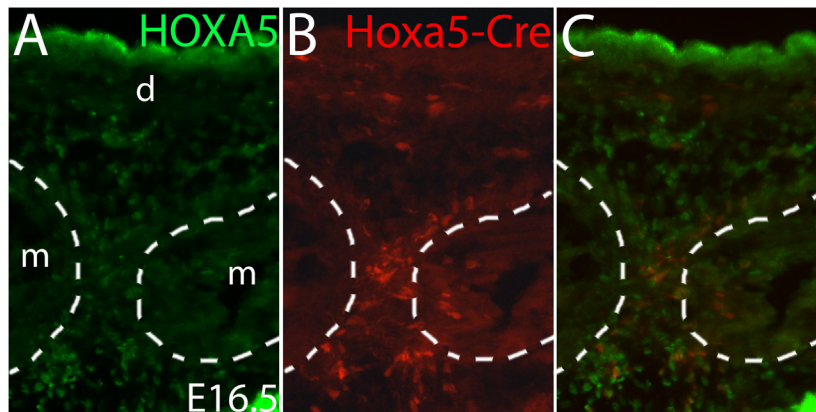
HOXA5 protein expression and genetic fate mapping show lineage restriction in the developing musculoskeletal system

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Suppl. Fig. 1. HOXA5 immunofluorescence did not reveal staining in tissues from *Hoxa5*^{-/-} embryos, confirming the specificity of the antibody. Staining in lung, trachea (A) and muscle fibroblasts (C) is observed in E12.5 *Hoxa5*^{+/+} specimens, while no signal was revealed in equivalent sections from E12.5 *Hoxa5*^{-/-} embryos. lu, lung; mf, muscle-embedded fibroblasts; vb, vertebral body. Scalebar: 20µm (A-D).



Suppl. Fig. 2. HOXA5 is expressed in the nuchal ligament at E16.5, as shown by comparison of HOXA5 protein (A) and Cre lineage label (B) and their overlap (C). Transverse image shows the nuchal ligament passing from the dermis (d), ventrally between the two trapezius muscles (m) to the neural arch (not pictured). Dorsal is up. Scalebar: 10 µM.

SUPPLEMENTARY TABLE 1

PRIMARY ANTIBODIES USED IN THIS STUDY

| Antigen | Source | Catalog Number or citation | Dilution | Antigen Retrieval Used | 0.1% Triton-X in block solution |
|----------------|-----------------------------------|------------------------------|--|-------------------------------------|--|
| COL1A1 | Rockland Immunochemicals | 600-401-D20 | 1:100 | No | No |
| HOXA5 | A kind gift from Dr. Jeremy Dasen | (Dasen <i>et al.</i> , 2005) | E9.5-E12.5 1:10,000 E13.5-E14.5 1:500 E16.5 1:250 | No | Yes |
| LAMININ | Sigma | L-9393 | 1:200 | No | No |
| MUSCLE ACTIN | Abcam | ab156302 | 1:100 | Yes | No |
| MUSCLE MYOSIN | DSHB | MF 20 | 1:10 | Yes | No |
| PAX3 | DSHB | PAX3 | 1:10 | No | No |
| PAX7 | DSHB | PAX7 | 1:10 | No: E10.5-11.5; Yes: E12.5-E16.5 | Added to 30' permeabilization but not to block solution |
| PDGFR α | R&D Systems | AF1062 | 1:50 | No | Yes |
| PPAR γ | Thermo Fisher | MA5-14889 | 1:400 | No | Yes |
| RFP | Rockland | 600-401-379 | 1:200 | No | Yes |
| RUNX2 | Abcam | ab22552 | 1:500 | No | Yes |
| SOX9 | Millipore | AB5535 | 1:1000 | No | Yes |
| TCF4 | Millipore | 05-511 (Clone 6H5-3) | 1:100 | Yes | No |
| TENASCIN | Sigma | T3413 | 1:200 | No | No |
| YFP/GFP | Abcam | ab290 | 1:1000 | No | Yes |
| YFP/GFP | Abcam | Ab13970 | 1:500 | No | Yes |