

Figure 2—Figure Supplement 1

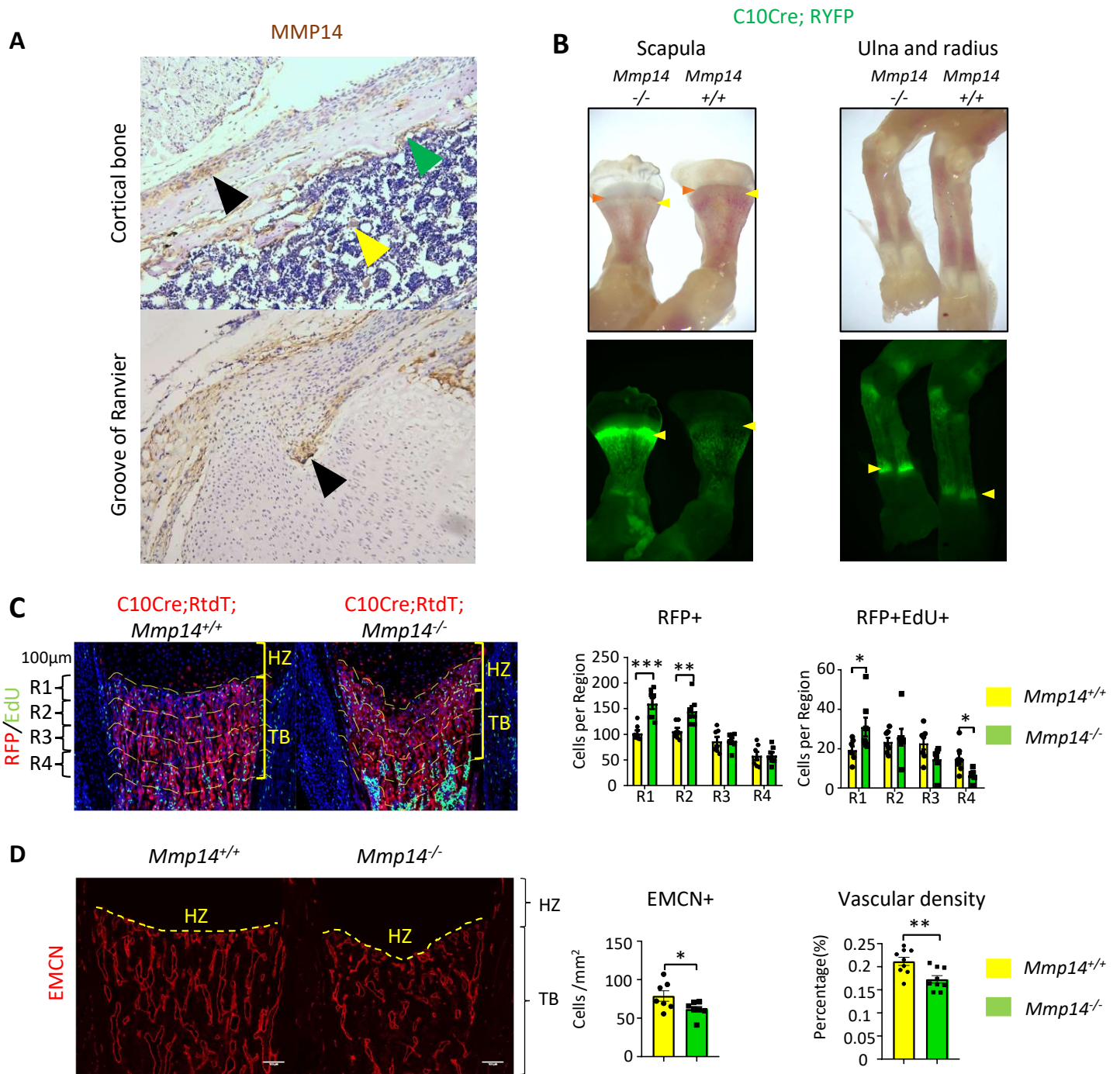


Figure 2—figure supplement 1. Abnormal localization of HC-descendants in *Mmp14*^{-/-} mice. Abnormal localization of HC-descendants in *Mmp14*^{-/-} mice. (A), cells in cortical bone and groove of ranvier at P10. Yellow arrow indicates Megakaryocytes. Green arrow indicate endosteal bone lining cells. Black arrow indicates perichondral cells. (B), Bright field and fluorescence images of radius, ulna and scapula of C10Cre;RYFP;*Mmp14*^{+/+} and C10Cre;RYFP;*Mmp14*^{-/-} mice at P3. Green fluorescence label HC-derived cells. Red arrows mark chondro-osseous junction. Yellow arrow marks trabecular region. HZ represents hypertrophic zone. (C), Immunofluorescence staining of RFP and Edu-labeled cells counterstained with DAPI in C10Cre;RtdT;*Mmp14*^{+/+} and C10Cre;RtdT;*Mmp14*^{-/-} tibia at P3. For quantification, the trabecular bone is divided into four zones, each 0.1 mm in thickness. The number of RFP+(red), RFP+Edu+(red and green) cells in each region were counted. Data are presented as means ± SEM ** p<0.01, * p<0.05, unpaired student's t test. (D), Immunostaining of Endomucin (Endo) labeling blood vessels below chondro-osseous junction comparing wild-type (yellow bar) and *Mmp14*^{-/-} (green bar) mice at P3. The vascular density and number of Ecmn cells are presented (n=9). Data are presented as means ± SEM ** p<0.01, * p<0.05, unpaired student's t test. HZ, hypertrophic zone. TB, trabecular bone.