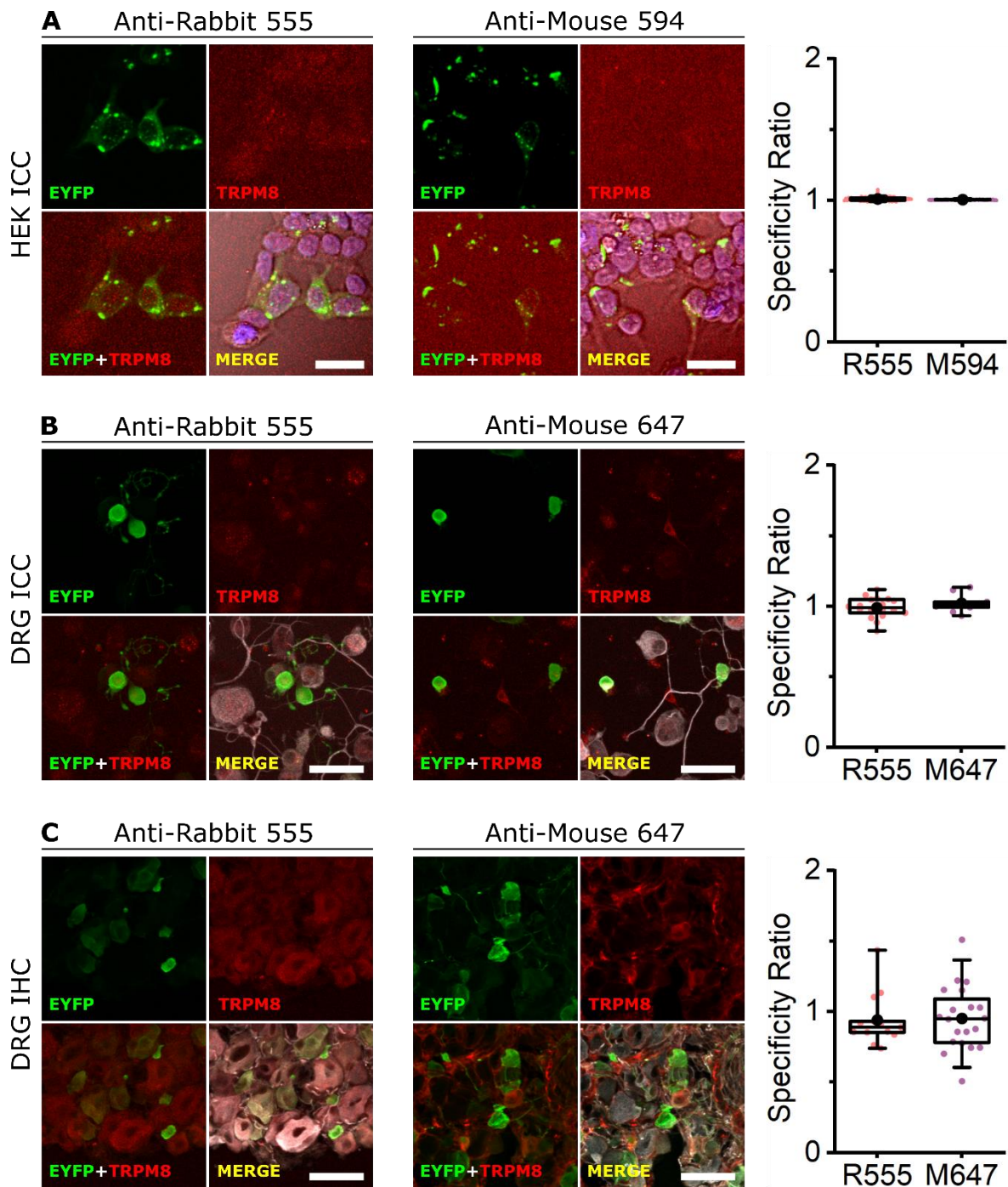
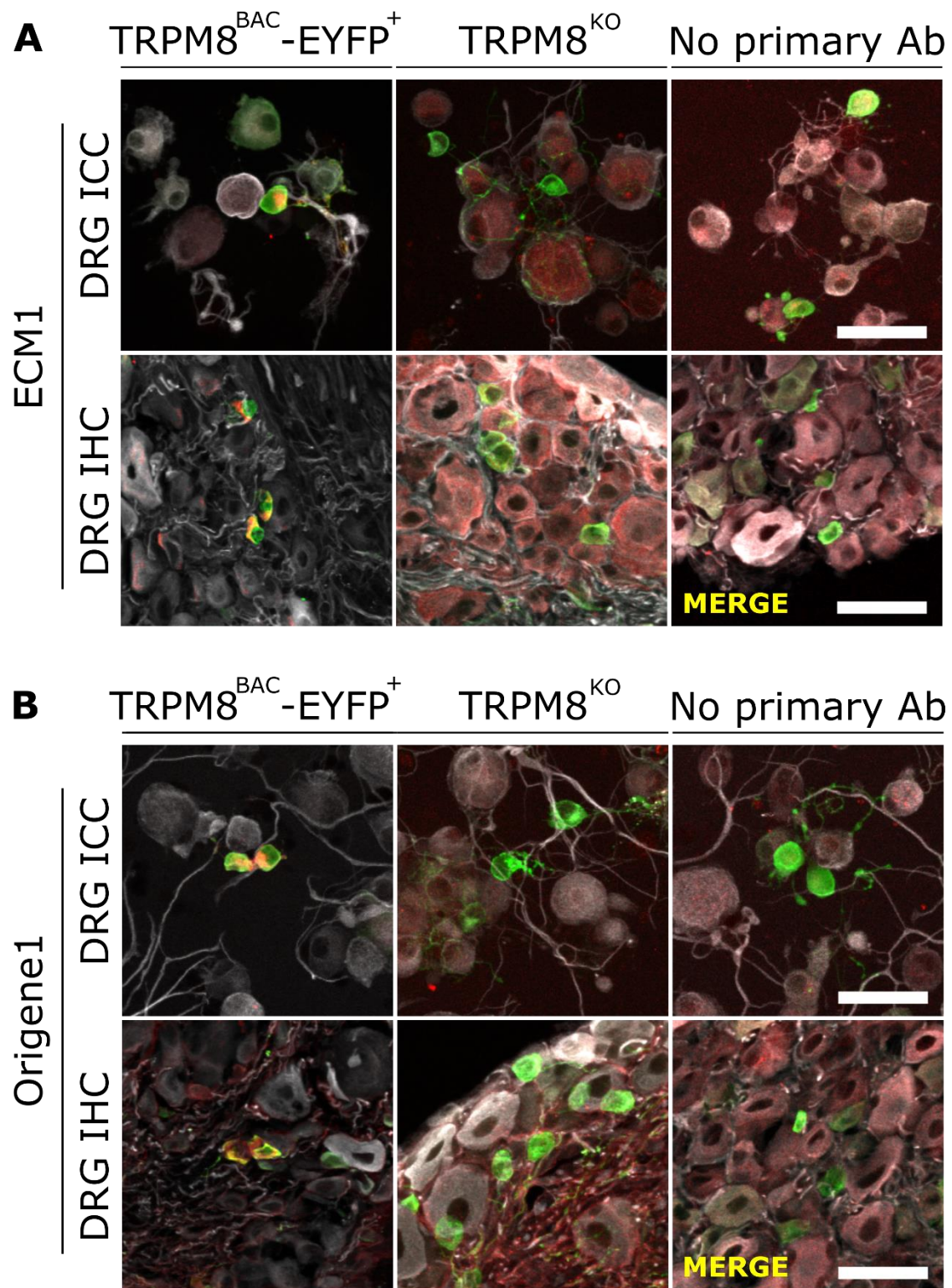


**FIGURE S1. Subcellular distribution of TRPM8 immunostaining in mTRPM8-EYFP transfected HEK cells ICC and DRG ICC and IHC.** Confocal images showing the fluorescent pattern of TRPM8 staining. Green: EYFP. Red: TRPM8 (Origene1 antibody). Blue: Hoechst. Scale bar: 10 $\mu$ m for HEK ICC, 15  $\mu$ m for DRG ICC and IHC.



**FIGURE S2. Control immunostainings without primary antibodies.** A, B, C left, middle. Confocal images of immunochemistry in transfected HEK-293 cells (A), cultured DRG neurons (B) and DRG slices (C) from the *Trpm8<sup>BAC</sup>-EYFP<sup>+</sup>* mouse. EYFP (green), no TRPM8 primary antibody (red), Hoechst (blue),  $\beta$ III-Tubulin (grey). Merge in A correspond to the overlap of the three fluorescent signals plus the bright field image. Scale bar: 30  $\mu$ m for A, 50  $\mu$ m for B and C. A,B,C right. Box plots represent specificity ratio (SR) for each dilution of the respective antibody. Each dot corresponds to an individual EYFP+ cell. Box contains the 25<sup>th</sup> to 75<sup>th</sup> percentiles. Whiskers mark the 5<sup>th</sup> and 95<sup>th</sup> percentiles. The line inside the box denotes the median and the black dot represents the mean. n = at least 10 cells; 2 images from 1 mouse for each secondary antibody.



**FIGURE S3 Comparison of TRPM8 immunostaining in the TRPM8 reporter mouse compared to TRPM8<sup>KO</sup> mouse and to control without primary antibodies.** Confocal merged images of ICC and IHC in DRGs using the ECM1 (A) and the Origene1 (B) antibodies. EYFP (green) TRPM8/secondary antibody alone (red), βIII-tubulin (grey). Scale bar: 50 μm.