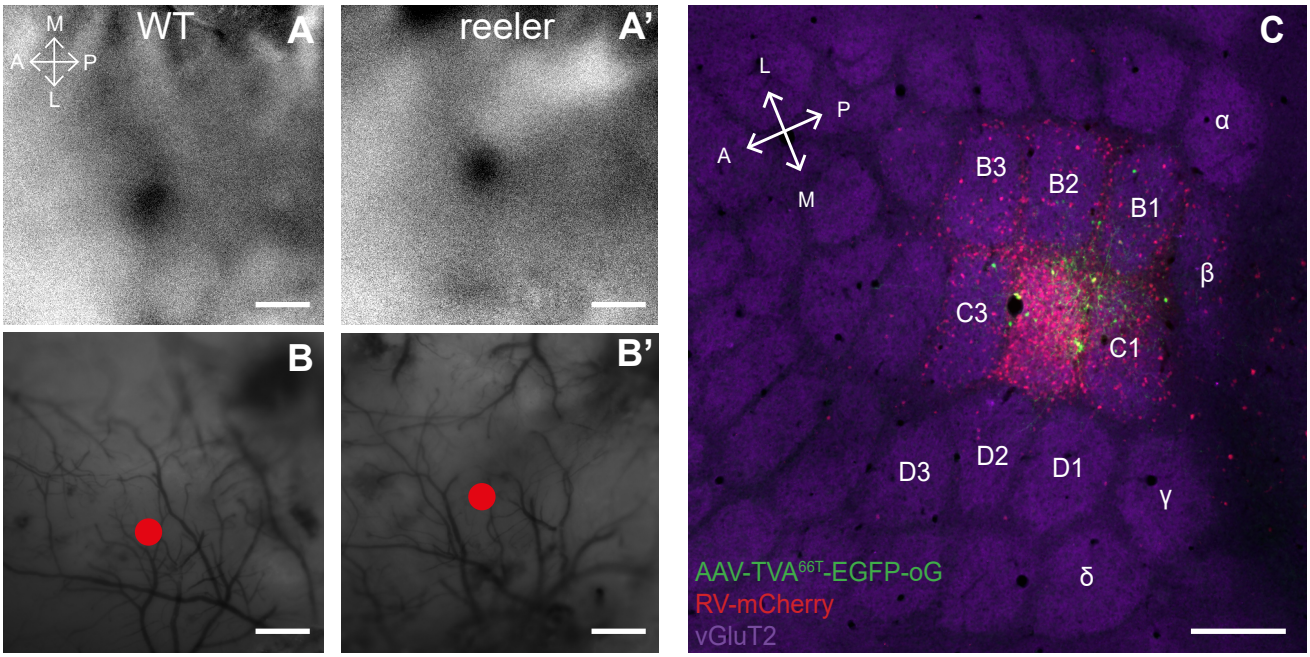

Figure S3: Mapping the whisker C2-related cortical module in barrel cortex to coherently target the tracer injections. Related to Figure 2.

(A, A') Red light was shone on the exposed cortical surface and its reflectance was measured with a CCD-camera, while the contralateral C2 whisker was stimulated. Repetitive whisker stimulation over 30 trials led to a localized change in blood flow, which induced a change in light reflectance visible as a dark spot. WT and reeler mice had very similar signals in terms of dynamics and size (scale bar: 200 µm).

(B, B') Surface vasculature was overlaid with image in A and the location of the strongest change in reflectance was marked. The blood vessels were used as landmarks to guide the injection pipette to the dot (scale bar: 200 µm).

(C) Tangential section of through the barrel cortex of a WT mouse after targeted injection of AAV-TVA66T-EGFP-oG and RV-mCherry into the C2 column. Staining thalamic terminals with vesicular glutamate transporter 2 (vGLuT2) allowed to visualize the barrels. The density of input cells was highest in C2 indicating that the majority of VIP starter cells was located within this barrel-related column (scale bar: 200 µm).