

Figure S2: Validation of constructs for RV-tracing in BL6 animals. Related to Figure 2.

- (A) Coronal section through the barrel cortex of a BL6 mouse (wild type) after injection of RV-mCherry, without prior injection of helper AAV. No transduced cells were detected. Uptake of RV into cells strictly depended on the presence of TVA (scale bar: $200 \mu m$).
- (B) AAV8-DIO-TVA66T-EGFP-oG and RV-mCherry were injected with the same titer as in experimental conditions but in a BL6 (wild type without Cre) animal. We did not observe any RV labeling at the injection site nor in the ventral posteromedial nucleus of the thalamus (insert), a structure with reliable input to the barrel cortex. Therefore, this AAV does not show leak expression in the absence of Cre that would confound the tracing experiments (scale bar: 200 µm).
- (C) Input magnitude was plotted against starter cell count for WT and reeler. There was no correlation between the two variables. Therefore, the difference in input magnitude between genotypes cannot be explained by a difference in starter cell numbers.