



Fig. S7 Ablation of V1 or SC neurons by AAV-hSyn-taCaps3 and expression of AAV-hSyn-hM4Di in V1. **a** Fluorescence staining of NeuN in V1 ablation and control mice, respectively. Bar= 500 μ m. **b** Superimposed gray shadow indicates ablation area of AAV-hSyn-taCaps3 in V1. **c** Statistical analysis of mean fluorescence intensity (reflected by mean gray value) of NeuN signals in V1 in control and ablated mice. *** $p < 0.001$ vs control, assessed by Students' t-test. **d** Fluorescence staining of NeuN in SC ablation and control mice, respectively. Bar = 500 μ m. **e** Superimposed gray shadow indicates ablation area of AAV-hSyn-taCaps3 in the SC. **f** Statistical analysis of mean fluorescence intensity (reflected by mean gray value) of NeuN signals in the SC in control and ablated mice. *** $p < 0.001$ vs control, assessed by Students' t-test. **g** Spontaneous fluorescence of mCherry indicates AAV-hSyn-hM4Di-mCherry expression in V1. Bar = 500 μ m. **h** Superimposed gray shadow indicates mCherry expression area of AAV-hSyn-hM4Di-mCherry in V1. V2M, medial secondary visual cortex; V2L, lateral secondary visual cortex; TeA, temporal association cortex; SuG, superficial gray layer of the superior colliculus; OP, optic nerve layer of the superior colliculus; InG, intermediate gray layer of the superior colliculus.