A 2a. AAV-FLEX-GFP to motor cortex at P56-P63

2b. AAV-FLEX-tdTomato to visual cortex at P56-P63

1. HiRet-Cre Injection to C3-C7 at P4

Pyramid

C3-C7

3D stacked whole-brain image

B GFP/RFP

Cell bodies in motor cortex

Cell bodies in visual cortex

Main CST tract

Pyramid

C Corticospinal neurons in one coronal section of motor cortex 40X

GFP/DAPI

D Cortical neurons in one coronal section of visual cortex 40X

RFP/DAPI

E Pyramid in one brain coronal section 40X

GFP/DAPI

E'

E' 100X

F Pyramid in one brain coronal section 40X

RFP/DAPI

G

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n = 5

Axon number /labeled cortical neuron number

Motor Cortex (RFA/CFA)

Visual cortex