Description of Additional Supplementary Files

File Name: Supplementary Movie 1

Description: Example of type I defensive behavior in wild-type mice.

File Name: Supplementary Movie 2

Description: Example of type II defensive behavior in wild-type mice.

File Name: Supplementary Movie 3

Description: Effects of synaptic inactivation of SC PV+ neurons on visually triggered

defensive behaviour.

File Name: Supplementary Movie 4

Description: Defensive behaviors triggered by optogenetic activation of PV+ SC-PBGN and

SC-LPTN pathways.

File Name: Supplementary Movie 5

Description: Fiber photometry recording of glutamatergic PBGN neurons during defensive

behaviors in a freely moving mouse.

File Name: Supplementary Movie 6

Description: Fiber photometry recording of glutamatergic LPTN neurons during defensive

behaviors in a freely moving mouse.

File Name: Supplementary Movie 7

Description: Defensive behaviors triggered by optogenetic activation of glutamatergic PBGN

neurons and LPTN neurons.

File Name: Supplementary Movie 8

Description: Effects of synaptic inactivation of glutamatergic PBGN neurons on visually

triggered defensive behavior.

File Name: Supplementary Movie 9

Description: Effects of synaptic inactivation of glutamatergic LPTN neurons on visually

triggered defensive behavior.