

Figure	Sample	[Aax]	Primary Ab	Primary incubation time and temperature	Secondary Ab	Secondary incubation time and temperature	Imaging	Processing: stitching, chromatic aberration, histogram matching
Fig 1	100 µm BLA from WT mouse	5 mM	r1: rb-PV (1:500) r2: rb-Calbindin (1:500) r3: rb-CB1R (1:333) r4: rb-PV (1:500) r5: rb-NOS (1:500) r6: rb-SERT (1:500) r7: rb-PV (1:500)	r1-r7: 1d at 37c	r1-r7: rb-AF488 (1:500), DAPI	r1-r7: 1d at 37c	r1-r7: Confocal, 10x Objective (0.4 NA), imaged in 1xPBS	Yes (3x2 tiles), No, No
Fig 2	200 µm BLA section from PV-Cre/Som-Cre stereotaxically injected with AAV2/9 Brainbow in BLA	1 mM	r1: rb-Calbindin (1:500), rat-SOMsc(1:100), gp-PV (1:500) r2: rb-mCherry (1:500), sh-GFP (1:500), gp-tagBFP (1:500)	r1: 3d at RT r2: 2d at 37c	r1: rat-AF488(1:500), rb-AF647 (1:500), gp-Cy3 (1:500) r2: rat-AF488(1:500), rb-AF647 (1:500), gp-Cy3 (1:500)	r1: 2d at RT r2: 2d at 37c	r1: Confocal, 10x objective (0.4 NA), imaged in 1x PBS r2: Confocal, 20x Objective (1.0 NA), imaged in 1x PBS	Yes (3x2 tiles), Yes, Yes
Fig 3, sFig9	100 µm S1 Cortex section from PV-Cre retro-orbitally injected with PhP.eB Brainbow	1 mM	r1: rb-mCherry (1:500), sh-GFP (1:500), gp-tagBFP (1:500) r2: sh-GFP (1:500), gp-Bassoon (1:500), ms-GephyrinSC (1:100) r3: rat-SOMsc (1:100), sh-GFP (1:500)	r1: 2d at RT r2: 2d at 37c r3: 2d at 37c	r1: rb-AF488 (1:500), sh-Cy3 (1:500), gp-AF647 (1:500) r2: ms-AF488 (1:500), sh-Cy3 (1:500), gp-AF647 (1:500) r3: sh-Cy3 (1:500), rat-AF647 (1:500)	r1: 1d at RT r2: 1d at 37c r3: 1d at 37c	r1: confocal, 20x objective (1.0 NA), imaged in 0.01x PBS r2: confocal, 20x objective (1.0 NA), imaged in 0.001x PBS r3: confocal, 20x objective (1.0 NA), imaged in 1x PBS	No, Yes, Yes
Fig 5	100 µm S1 cortex section from PV-Cre stereotaxically injected with AAV2/9 Brainbow in BLA	1 mM	r1: rb-mCherry (1:500), sh-GFP (1:500), gp-tagBFP (1:500) r2: gp-Bassoon (1:500), ms-GephyrinSC (1:100), sh-GFP (1:500)	r1: 2d at 37c r2: 1d at 37c	r1: gp-AF647 (1:500), ms-AF488 (1:500), sh-Cy3 (1:500) r2: rb-AF488 (1:500), gp-AF647 (1:500), sh-Cy3 (1:500)	r1-r2: 1d at 37c	r1: Confocal, 20x Objective (1.0 NA), imaged in 0.01x PBS r2: Confocal, 20x Objective (1.0 NA), imaged in 0.0001x PBS	Yes (2x2 tile), Yes, Yes
sFig 1	100 µm VGAT-Cre x Ai14 S1 cortex	1 mM	r1: rb-mCherry (1:500)	r1: 1d at 37c	r1: rb-AF488 (1:500) post strip: rb-AF647 (1:500)	r1/post strip: 1d at 37c	Confocal, 10x objective(0.4 NA) , imaged in 1x PBS	No, No, No
sFig 2	100 µm Thy1-YFP S1 cortex	1 mM	sh-GFP (1:500)	1 day at 37c	sh-AF594 (1:500)	1d at 37c	Confocal, 10x Objective (0.4 NA), imaged in Vectashield, 1xPBS,0.001x PBS	No, No, No
sFig 4	100 µm human sensory cortex	5 mM	r1: rb-Calbindin (1:500), gp-Calretinin (1:500), ms-GFAP (1:500) r2: ms-SMI312 (1:333), rb-PV(1:500)	r1-r2: 1d at 37c	r1: rb-Cy3 (1:500), gp-AF488 (1:500), ms-AF647 (1:500), DAPI r2: ms-AF488 (1:500), rb-AF647 (1:500), DAPI	r1-r2: 1d at 37c	r1-r2: Confocal, 10x objective (0.4 NA), imaged in 1xPBS	Yes (2x1 tile), No, No
sFig 5	100 µm WT dorsolateral striatum	5mM	r1: gt-ChAT (1:500), rb-CB1R(1:500), ck-TH (1:500) r2: rb-NOS (1:500), sh-NPY(1:500), rat-SOM (1:100) r3: Lectin (1:1000), ms-GFAP (1:500), rb-SERT (1:500) r4: rb-D2R (1:500), rat-D1R(1:500), gp-lba1(1:300) r5: gp-VGLUT2 (1:500), rb-MBP (1:500)	r1-r5: 1d at 37c	r1: ck-AF488 (1:500), rb-Cy3 (1:500), gt-CF647 (1:500), DAPI r2: sh-AF488 (1:500), rb-Cy3 (1:500), rat-AF647 (1:500), DAPI r3: ms-AF488 (1:500), rb-AF647 (1:500), DAPI r4: gp-AF488 (1:500), rb-Cy3 (1:500), rat-AF647 (1:500), DAPI r5: gp-AF488 (1:500), rb-Cy3 (1:500)	r1-r5: 1d at 37c	r1-r5: Confocal, 10x objective (NA 0.4), imaged in 1x PBS	Yes (2x2 tile), No, No
sFig 7	100 µm WT mouse	1 mM	rb-Homer1a (1:500), ms-GephyrinSC (1:100), gp-Bassoon (1:500)	2d at 37c	ms-AF488 (1:500), rb-Cy3 (1:500), gp-AF647 (1:500)	1d at 37c	Confocal, 20x objective (1.0 NA), imaged in 0.001x PBS	No, Yes, Yes
sFig 8	100 µm S1 Cortex section from PV-Cre retro-orbitally injected with PhP.eB Brainbow (same brain as Fig.3)	1 mM	gp-tagBFP(1:500), rb-PV (1:500), sh-GFP (1:500)	1d at 37c	gp-AF647 (1:500), sh-Cy3 (1:500), rb-AF488 (1:500)	1d at 37c	Confocal, 10x objective (0.4 NA), imaged in 1xPBS	Yes (2x2 tile), Yes, Yes