

Supplementary Tables

| Table S1 synOptopatch constructs | Vector | Addgene |
|---|---------------|----------------|
| LZF40: hSyn-Cre | Lenti-vector | 109378 |
| LZF43: Cre-on CAG-CheRiff-CFP (DIO) | Lenti-vector | 104114 |
| LZF80: Cre-on CAG-CheRiff-soma-CFP (DIO) | Lenti-vector | 104115 |
| LZF42: Cre-off hSyn-QuasAr2-Citrine (<i>FAS</i>) | Lenti-vector | 104116 |
| LZF70: Cre-off hSyn-QuasAr2-dark Citrine (<i>FAS</i>) | Lenti-vector | 104117 |
| LZF39: Cre-off hSyn-CheRiff-CFP (<i>FAS</i>) | Lenti-vector | 104118 |
| LZF1718: Cre-off hSyn-CheRiff-CFP (<i>FAS</i>) | AAV vector | 104119 |
| LZF94: Cre-on CAG-spine-GCaMP6s | AAV vector | 104120 |
| LZF97: hSyn-spine-jRGECO1a | Lenti-vector | 104121 |
| LZF1604: CAG-spine-jRGECO1a-P2A-QuasAr2-dark Citrine | pcDNA | 104122 |
| LZF1723: mI12b-EGFP | Lenti-vector | 104123 |