**Supplementary Table 6. Functional parameters of mEPSCs obtained in anterior cingulate cortex excitatory neurons of Mef2cf/f and Mef2cCKO mice exposed to three different sleep/wake experimental conditions: control sleep 6h (CS), sleep deprivation 6h (SD) and sleep deprivation 4h followed by recovery sleep 2h (RS).**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **mEPSC parameter** | Units | **Mef2cf/f** | | | | | | | | | | **Mef2cCKO** | | | | | | | | | |
|  |  | *Fig.4 B,C, D* | | | | | | | | | | *Fig.4 H,I,J* | | | | | | | | | |
| *From N cell experim. values* |  | N | | Mean ± SEM | ANOVA F, (DFn, DFd) | | ANOVA, Adjusted P value | | | | | N | Mean ± SEM | | ANOVA F, (DFn, DFd) | | ANOVA, Adjusted P value | | | | |
| CS | SD | | RS | | CS | | SD | | RS |
| Frequency, CS | Hz | 14 | | 6.8±1.1 | 11.3  (2,38) | | N/A | 0.002 | | 0.707 | | 14 | 9.0±1.3 | | 0.06  (2,36) | | N/A | | 0.96 | | 0.996 |
| Frequency, SD | Hz | 15 | | 12.7±1.4 | 0.002 | N/A | | 0.0003 | | 12 | 8.5±1.4 | | 0.96 | | N/A | | 0.94 |
| Frequency, RS | Hz | 12 | | 5.4±0.7 | 0.707 | 0.0003 | | N/A | | 13 | 9.2±1.6 | | 0.996 | | 0.94 | | N/A |
| Peak ampl., CS | pA | 14 | | 7.9±0.4 | 3.44  (2,38) | | N/A | 0.058 | | 0.98 | | 14 | 9.0±0.5 | | 0.43  (2,36) | | N/A | | 0.99 | | 0.66 |
| Peak ampl., SD | pA | 15 | | 9.3±0.5 | 0.058 | N/A | | 0.106 | | 12 | 9.1±0.6 | | 0.99 | | N/A | | 0.76 |
| Peak ampl., RS | pA | 12 | | 8.0±0.4 | 0.98 | 0.106 | | N/A | | 13 | 9.8±0.9 | | 0.66 | | 0.76 | | N/A |
| Charge/min, CS | pC/min | 14 | | 12.1±2.6 | 9.05  (2,38) | | N/A | 0.0041 | | 0.86 | | 14 | 16.6±3.2 | | 0.32  (2,36) | | N/A | | 0.96 | | 0.86 |
| Charge/min, SD | pC/min | 15 | | 25.6±3.6 | 0.0041 | N/A | | 0.0014 | | 12 | 15.3±1.4 | | 0.96 | | N/A | | 0.71 |
| Charge/min, RS | pC/min | 12 | | 9.9±1.5 | 0.86 | 0.0014 | | N/A | | 13 | 19.2±4.1 | | 0.86 | | 0.71 | | N/A |
|  |  | *Fig.4 B,C, D* | | | | | | | | | | *Fig.4 H,I,J* | | | | | | | | | |
| *From N cell experim. values* |  | N | Median | | | 25% -tile | 75% -tile | | Min value | | Max value | N | | Median | | 25% -tile | 75% -tile | Min value | | Max value | |
| Frequency, CS | Hz | 14 | 5.29 | | | 3.83 | 8.57 | | 2.58 | | 16.3 | 14 | | 8.12 | | 5.22 | 11.8 | 1.16 | | 17.5 | |
| Frequency, SD | Hz | 15 | 11.5 | | | 8.05 | 16.4 | | 4.80 | | 22.9 | 12 | | 6.12 | | 4.91 | 12.8 | 2.79 | | 19.0 | |
| Frequency, RS | Hz | 12 | 5.03 | | | 4.20 | 5.82 | | 3.05 | | 12.1 | 13 | | 8.68 | | 4.06 | 12.5 | 2.70 | | 21.9 | |
| Peak ampl., CS | pA | 14 | 7.46 | | | 6.85 | 8.73 | | 6.43 | | 11.8 | 14 | | 8.81 | | 7.46 | 9.84 | 6.40 | | 13.1 | |
| Peak ampl., SD | pA | 15 | 9.56 | | | 7.44 | 10.6 | | 6.75 | | 13.8 | 12 | | 8.59 | | 7.87 | 9.92 | 6.93 | | 14.5 | |
| Peak ampl., RS | pA | 12 | 7.50 | | | 7.11 | 9.07 | | 6.57 | | 11.3 | 13 | | 8.43 | | 7.76 | 12.5 | 5.16 | | 17.0 | |
| Charge/min, CS | pC/min | 14 | 9.17 | | | 6.17 | 13.4 | | 3.92 | | 41.1 | 14 | | 13.7 | | 9.71 | 19.7 | 1.95 | | 49.9 | |
| Charge/min, SD | pC/min | 15 | 20.2 | | | 16.4 | 36.8 | | 7.14 | | 56.3 | 12 | | 11.5 | | 8.38 | 19.5 | 4.92 | | 40.7 | |
| Charge/min, RS | pC/min | 12 | 8.22 | | | 6.42 | 11.1 | | 5.51 | | 21.6 | 13 | | 15.2 | | 9.71 | 28.4 | 3.60 | | 51.5 | |
|  |  | *Fig.4 E,F* | | | | | | | | | | *Fig.4 K,L* | | | | | | | | | |
| *From N averaged cumul. histograms* |  | N | | Average median  ± SEM | ANOVA F, (DFn, DFd) | | ANOVA, Adjusted P value | | | | | N | Average median  ± SEM | | ANOVA F, (DFn, DFd) | | ANOVA, Adjusted P value | | | | |
| CS | SD | | RS | | CS | | SD | | RS |
| Inst. freq., CS | Hz | 14 | | 2.4±0.4 | 6.18  (2,297) | | N/A | 0.020 | | 0.82 | | 14 | 3.0 ±0.4 | | 0.07  (2,294) | | N/A | | 0.99 | | 0.96 |
| Inst. freq., SD | Hz | 15 | | 4.6±0.5 | 0.020 | N/A | | 0.0031 | | 12 | 3.0±0.5 | | 0.99 | | N/A | | 0.93 |
| Inst. freq., RS | Hz | 12 | | 2.1±0.3 | 0.82 | 0.0031 | | N/A | | 13 | 3.4±0.6 | | 0.96 | | 0.93 | | N/A |
| Peak ampl., CS | pA | 14 | | 7.1±0.3 | 4.37  (2,297) | | N/A | 0.022 | | 0.97 | | 14 | 7.8±0.3 | | 0.95  (2,297) | | N/A | | 0.96 | | 0.39 |
| Peak ampl., SD | pA | 15 | | 8.2±0.4 | 0.022 | N/A | | 0.040 | | 12 | 7.9±0.3 | | 0.96 | | N/A | | 0.55 |
| Peak ampl., RS | pA | 12 | | 7.1±0.3 | 0.97 | 0.040 | | N/A | | 13 | 8.1±0.6 | | 0.39 | | 0.55 | | N/A |