**Table S2. Intracellular APP/Aβ load in APPSwe/PS1L166P mice is not affected by chronic neuronal activity inhibition by TTX.**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **HIP** | | **EC** | | |
| Condition | Optical density (AU)  (mean±SEM) | Layer thickness  (µm)  (mean±SEM) | Optical density  (AU)  (mean±SEM) | APP/Aβ+cell number  (APP/Aβ+cell number/mm2)  (mean±SEM) | APP/Aβ+cell size  (µm2)  (mean±SEM) |
| VEHICLE | 1.07 ± 0.08 | 1.03 ± 0.04 | 1.07 ± 0.35 | 1.00 ± 0.06 | 0.97 ± 0.04 |
| TTX | 0.98 ± 0.04 | 1.04 ± 0.04 | 1.28 ± 0.48 | 1.06 ± 0.04 | 0.98 ± 0.03 |

(n=5 in each group, One-way ANOVA, *P*˃0.05)

(HIP: hippocampus; EC: Entorhinal Cortex; TTX: Tetrodotoxin; SE:Standard Environment; EE: Enriched Environment)