



SUPPLEMENTARY FIG. S3. Intrinsic excitability in type B layer V pyramidal neurons is not modified by mild repetitive TBI (rTBI) or integrated stress response inhibitor (ISRIB) treatment. (A) Depiction of layer V pyramidal neurons indicating type B being recorded along with representative image of a filled type B pyramidal neuron overlaying image of patch pipette in the medial prefrontal cortex. (B) Representative traces from type B layer V pyramidal neurons showing the membrane potential response to current injection (-250, -150, -50, 200pA) from sham mice (light blue), rTBI mice (dark blue), and rTBI mice treated with ISRIB (red). (C) No difference in the relationship of the first firing frequency versus amplitude of current injection was observed between groups ($p=0.423$; repeated measures two-way analysis of variance [ANOVA]). Likewise, other measures of intrinsic excitability including the adaptation index (D, $p=0.425$; Kruskal- Wallis test) and the action potential threshold (E, $p=0.675$; one-way ANOVA) were similar between neurons from sham, rTBI, and rTBI+ISRIB mice. Each neuron is represented with a symbol; solid lines indicate the mean \pm standard error of the mean in C and E, and median $\pm 95\%$ confidence interval in D ($n=13, 16, 16$ sham, rTBI, rTBI+ISRIB neurons, respectively, from 9 (sham), 8 (rTBI), and 8 (rTBI+ISRIB) animals/group with 1–4 neurons recorded per animal).

SUPPLEMENTARY TABLE S1. ELEVATED PLUS MAZE SCORES—SHAM

Surgery	No. of isoflurane exposure	Sutures	No of vehicle Injections	Time in open + center (%)
Sham	1	Yes	0	31.1 \pm 2.4
Sham	5	No	0	31.5 \pm 1.7
Sham	5	No	1	26.7 \pm 2.2

Elevated Plus Maze scores were compared between different types of sham surgeries. Specifics of different sham surgeries performed denoted in table but included number of isoflurane exposure, sutures, and vehicle injections. No differences between groups were observed; therefore, sham groups were combined for analysis.

SUPPLEMENTARY TABLE S2. ELEVATED PLUS MAZE SCORES—VEHICLE

Surgery	No of vehicle Injections	Time in open + center (%)
rTBI	0	46.2 \pm 1.9
rTBI	1	45.2 \pm 1.9

Elevated Plus Maze scores were compared between rTBI +/- vehicle injection. No differences between groups were observed; therefore, repetitive traumatic brain injury (rTBI) groups were combined for analysis.

SUPPLEMENTARY TABLE S3. ELEVATED PLUS MAZE SCORES—PERFORMANCE

Surgery	No of EPM	Time in open + center (%)
rTBI	1	40.0 \pm 3.2
rTBI	2	37.8 \pm 2.5

Elevated Plus Maze (EPM) scores were compared between mice that performed EPM at both 31 days and 100 days versus mice that only performed EPM at 100 days. No differences between groups were observed; therefore, repetitive traumatic brain injury (rTBI) groups were combined for analysis.