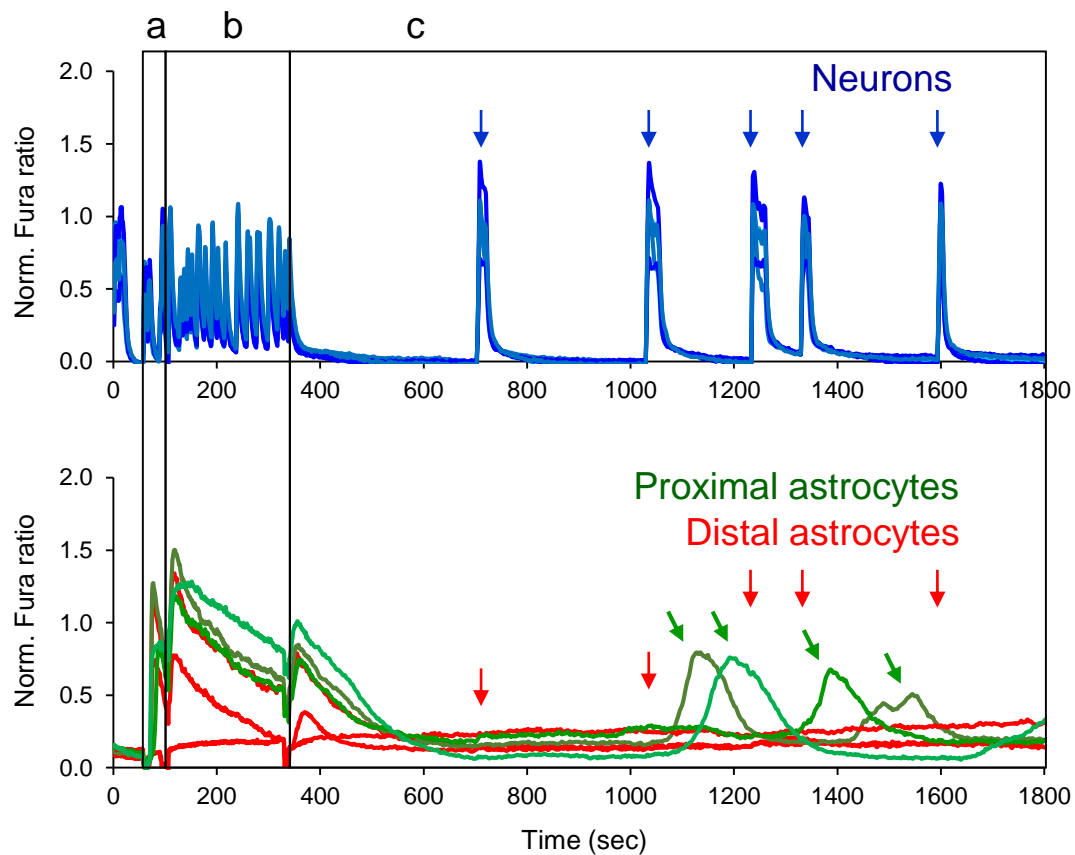
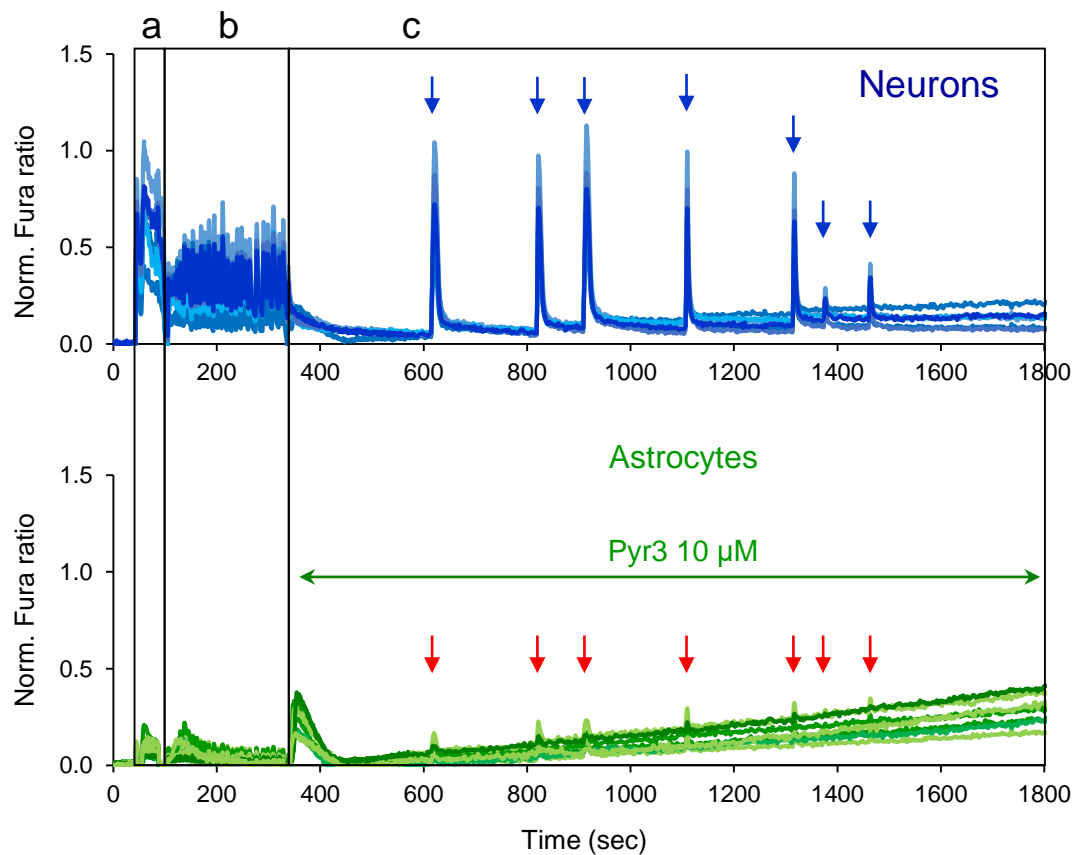


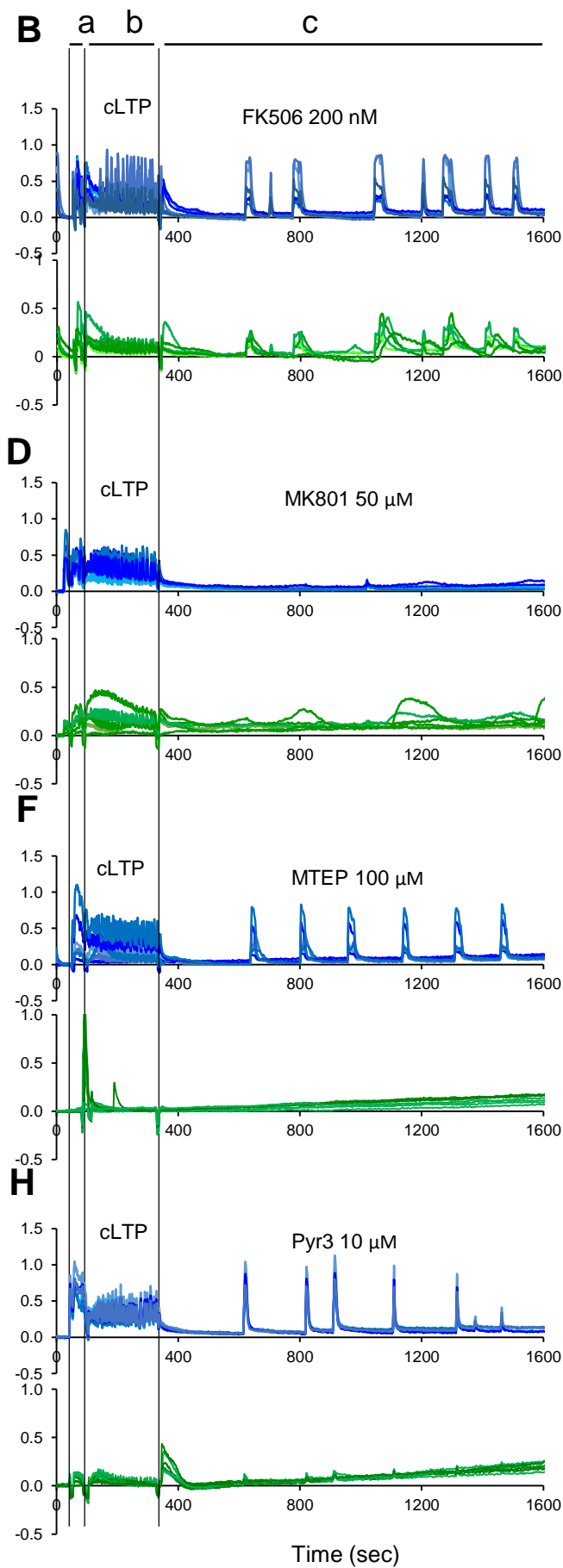
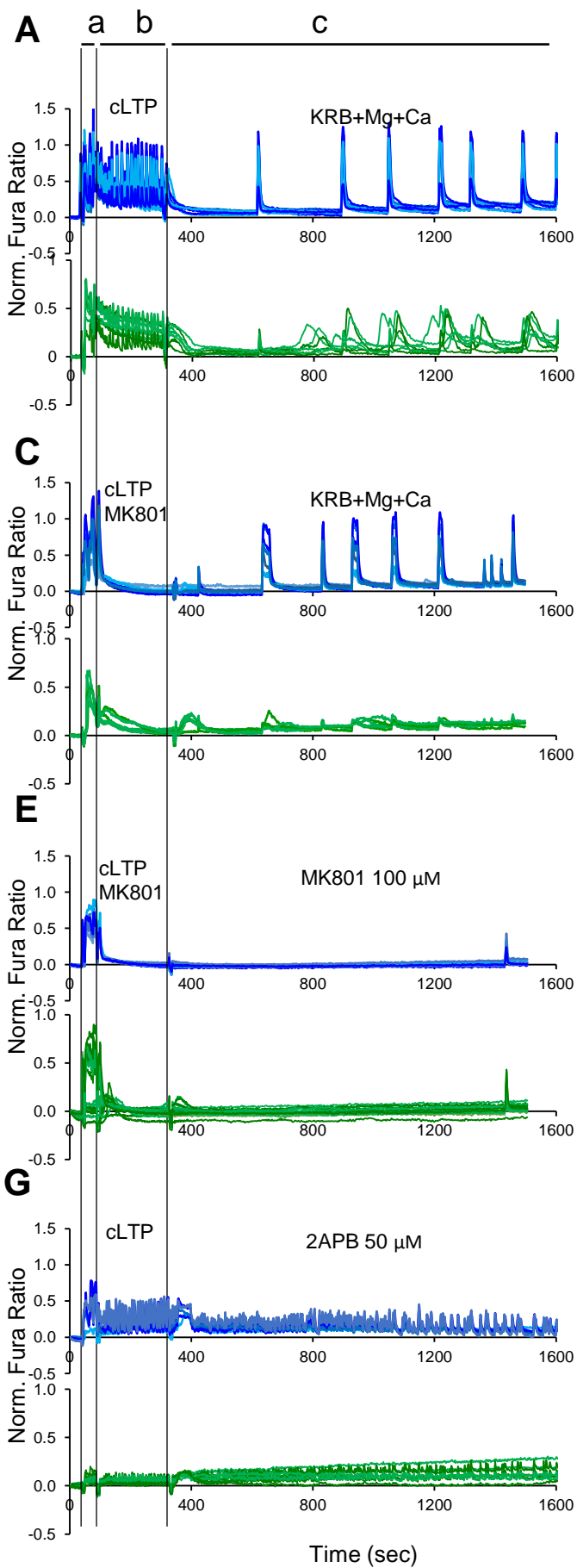
## Neuronal activity-dependent activation of astroglial calcineurin in mouse primary hippocampal cultures

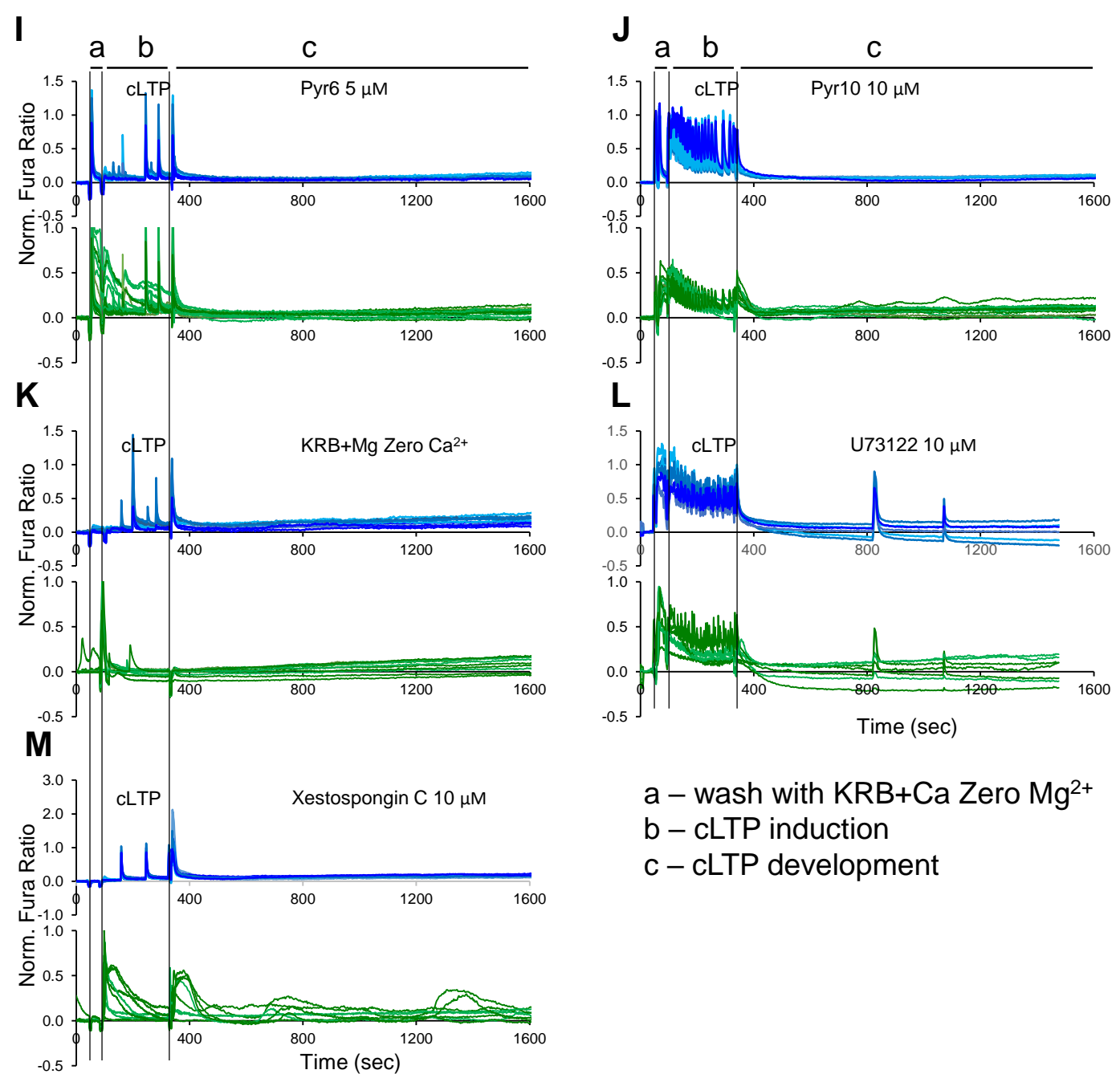
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Supplementary material	Title	File
Supplementary video 1	Ionomycin-induced nuclear translocation of NY calcineurin sensor	Suppl_Video_1
Supplementary Figure 1	Examples of neuronal and astroglial Ca <sup>2+</sup> signals induced by cLTP induction protocol	Suppl_Figures
Supplementary Figure 2	Neuronal Ca <sup>2+</sup> transients registered during stimulation of mixed neuron-astroglial hippocampal cultures with cLTP protocol.	Suppl_Figures

**A****B**

**Supplementary Figure 1.** Representative Fura-2  $\text{Ca}^{2+}$  imaging experiments demonstrating cLTP-induced  $\text{Ca}^{2+}$  transient in neurons (blue traces) and astrocytes (in juxtaposition to neurons, green traces, or distal astrocytes, red traces). In black frame, the sector (a) indicates  $\text{Mg}^{2+}$  washout; sector (b), cLTP induction phase; and sector (c), cLTP development phase. During the cLTP development phase, blue arrows indicate  $\text{Ca}^{2+}$  spikes in neurons, green arrows – delayed cLTP-induced  $\text{Ca}^{2+}$  transients in astrocytes, and red arrows – artifacts due to light interference with neuronal  $\text{Ca}^{2+}$  spikes. A, control induction of cLTP; B, inhibition of cLTP-induced delayed astroglial  $\text{Ca}^{2+}$  transients with SOCE inhibitor Pyr3





**Supplementary Figure 2.** Neuronal (blue) and astroglial (green)  $\text{Ca}^{2+}$  transients registered during stimulation of mixed neuron-astroglial hippocampal cultures with cLTP protocol. Panel labels correspond to panels in Figure 5 described in the main text. Sector (a) indicates  $\text{Mg}^{2+}$  washout with KRB+Ca Zero  $\text{Mg}^{2+}$ ; sector (b), cLTP induction phase; and sector (c), cLTP development phase. In the sector (b), cLTP indicates the cLTP induction phase.