Supplementary Figure 1. Activation of metabotropic glutamate receptors induces Ca\(^{2+}\) increase in the presence of GAT-3 inhibitor. **Top:** representative trace showing change in astrocytic Ca\(^{2+}\) level following application of t-ACPD (50 μM) in the presence of SNAP5114. **Bottom:** Summary graph (n = 14 cells/2 animals); individual recordings represented by dots, means displayed by bars, error bars represent SEMs; * p = 0.003 (paired t-test compared to baseline).
**Supplementary Figure 2.** β-alanine action on astrocytic Ca\(^{2+}\) responses and EPSCs. (a) β-alanine (1 mM) induces Ca\(^{2+}\) response in astrocytes (n = 13 cells/2 animals). Note that Ca\(^{2+}\) increase is smaller than that induced by 30 µM GABA (c.f. Fig. 4e). (b) Normalized EPSC amplitudes in response to application of 1 mM β-alanine (n = 6 cells/2 animals). (c) Normalized EPSC amplitudes in response to application of 2 mM β-alanine (n = 3 cells/2 animals). Error bars represent SEMs, * p = 0.004 (paired t-test compared to baseline).
Supplementary Figure 3. Astrocytic Ca\(^{2+}\) responses to a one second, 100 Hz tetanus are reduced in the presence of the GAT-3 inhibitor SNAP5114 (100 µM). (a) Mean Ca\(^{2+}\) indicator fluorescence response (n = 5 cells/5 animals) to 100 Hz Schaffer collateral stimulation in control conditions (black) and in SNAP5114 (red). (b) Peak Ca\(^{2+}\) response amplitude for individual recordings (dots) and mean of five cells (bars). Error bars represent SEMs; * p = 0.016 (paired t-test).