



Figure S1. Graphical representation of electrophysiological recording and analysis methods. A. Illustration of recording electrode placement in layer II of the medial entorhinal cortex brain slice obtained from a KA-rat. B. All recordings were performed in 8 brain slices simultaneously using the Scientifica Slicemaster high-throughput electrophysiology workstation. C. Representative trace illustrating REDs as they are directly recorded under our experimental conditions. D. Before analysis, REDs are high-pass filtered (Bessel 8 pole filter, with a cutoff of 5Hz). RED parameters quantified in this report (duration, frequency, and amplitude) are extracted from these filtered electrophysiological recordings. E. Data were then subjected to CLAMPFIT 10.4 automated event detection (threshold search) and burst analysis with a burst-delimiting interval of 1000-1500 ms.