

Figure 2. Effects of LC stimulation on SEP amplitudes. (A) Schematic view of SEP recording. SEPs were obtained by placing a ball electrode on the ipsilateral S1 of LC stimulation and stimulating the forepaw on the opposite side. (B) Representative example of recorded SEP waveforms and calculation of amplitude values. The timing of forepaw stimulation is indicated by triangles. The SEP amplitude was obtained as the difference between positive and negative peaks. (C) Experimental design (Experiment 1). (D–F) Temporal changes in SEPs for each stimulus. Changes in percent baseline SEP values before, during, and after LC stimulation at 0.1 (D, n = 6), 1 (E, n = 7), and 4 Hz (F, n = 6) are shown. Insets represent examples of SEPs recorded at time points indicated by lowercase letters (a and b) in the graphs. (G) Differences in SEP between conditions. The percent baseline of SEPs obtained at time point “b” indicated in Figure D–F is shown. SEPs in the 1-Hz stimulation were increased compared with those for the 0.1 or 4 Hz stimulation conditions. \*p < 0.05 and \*\*p < 0.01 (Kruskal-Wallis one-way ANOVA followed by Dunn's post hoc tests). SEP amplitudes are expressed as median and interquartile ranges. (H) Inter-individual comparison between stimulation conditions. The color corresponds to the stimulus condition, and the inserted numbers indicate the session number. (I) Experimental design (Experiment 2). In this experiment, no test stimulus was applied to the forepaw during LC stimulation. SEP amplitudes are expressed as mean ± SEM. n = 5, \*p < 0.05 (paired *t*-test).