## **Supplemental Figures**

SG1 MUA



**Supplemental Fig. 1.** Normalized SG1 MUA data averaged across electrode penetrations. Same conventions and sample sizes as in Fig. 6.



**Supplemental Fig. 2.** Normalized SG2 MUA data averaged across electrode penetrations. Same conventions and sample sizes as in Fig. 6.

## LL3 PSTH



**Supplemental Fig. 3.** Normalized LL3 PSTH data averaged across electrode penetrations. Same conventions and sample sizes as in Fig. 6.



**Supplemental Fig. 4.** Normalized LL3 MUA data evoked by Harmonic and Mistuned stimuli comprising the "Shift F0" stimulus block averaged separately across sites with a low ( $\leq$  1 kHz) and a high (> 1 kHz) BF (black and white bars; N=24 and 22 sites, respectively). Error bars represent s.e.m. Except where indicated by 'ns', all differences between mean normalized response amplitudes under Mistuned and Harmonic conditions are statistically significant (planned one-tailed unpaired *t*-test), with *p* values ranging from <.05 to <.0000005.