

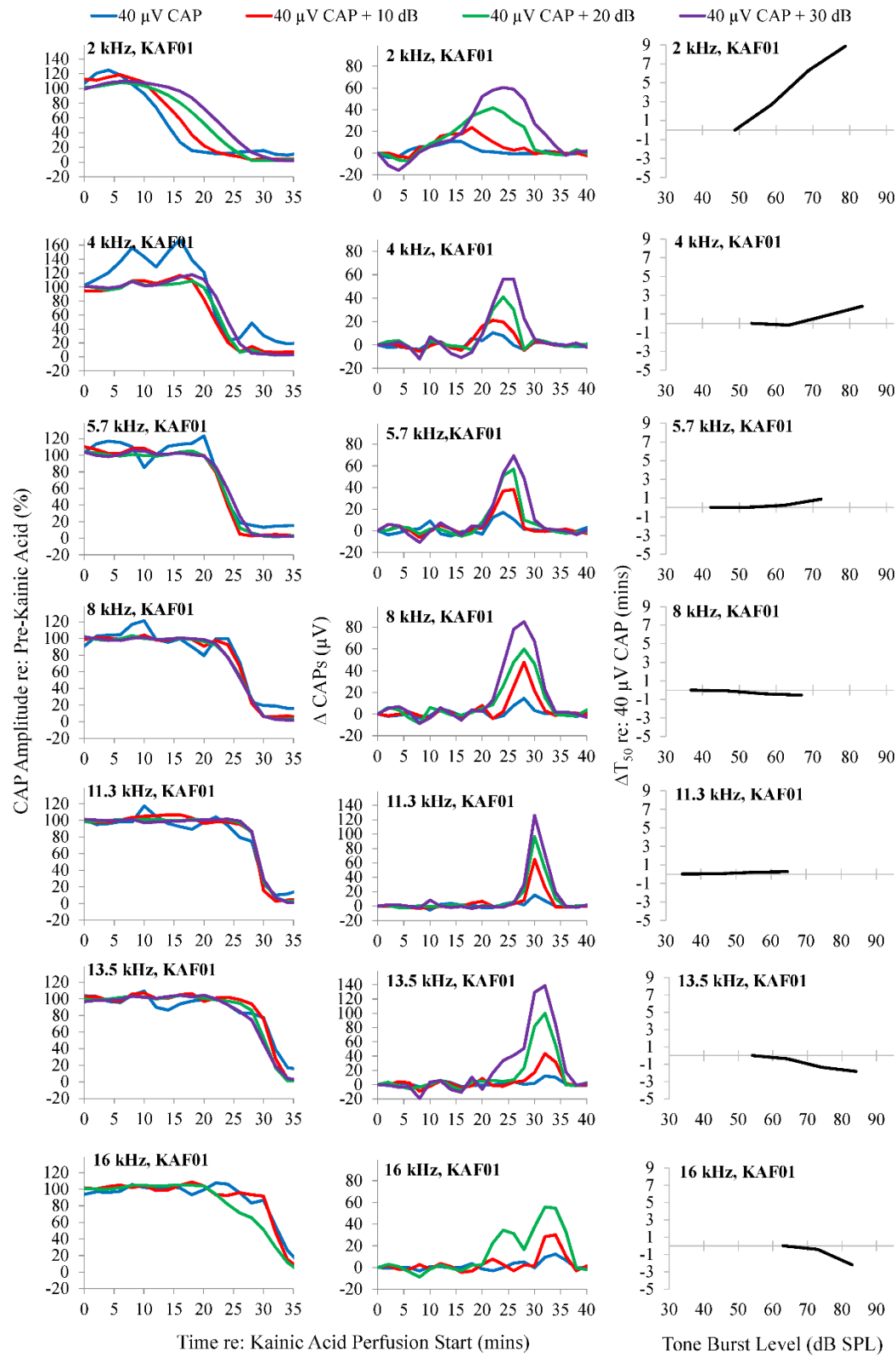
Supplementary Material for: “Cochlear compound action potentials from high-level tone bursts originate from wide cochlear regions that are offset toward the most sensitive cochlear region”, by Lee, Guinan, Rutherford, Kaf, Kennedy, Buchman, Salt, and Lichtenhan.

Caption for the Supplementary Movie: A rotating three-dimensional reconstruction of a guinea pig scala tympani (orange) and cochlear aqueduct (red). This was based on orthogonal-plane fluorescence optical sectioning (OPFOS) microscopy of a guinea pig ear (Voie AH, Burns DH, Spelman FA. (1993). Orthogonal-plane fluorescence optical sectioning: three-dimensional imaging of macroscopic biological specimens. *J Microsc.* 170:229-236). One OPFOS section is shown in grayscale. The entire ear was segmented using Amira software, with segmentation being verified in three different orientations. The scala tympani of each section was identified and used for this three-dimensionally reconstruction.

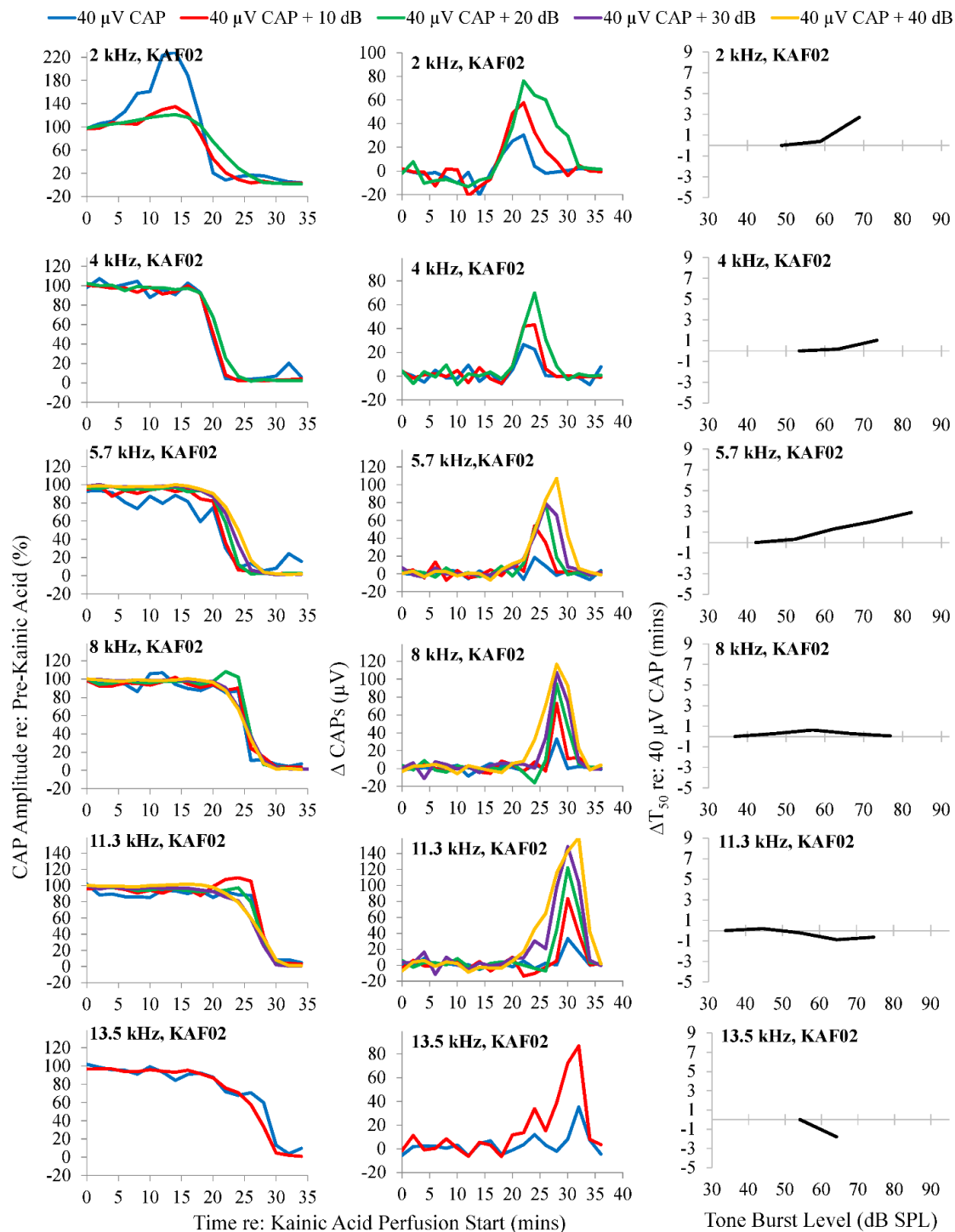
Caption for the Supplementary Material: The individual ear data used to make Figure 1.

In the following four pages are Figs S1A-D, the individual-ear data for animals KAF01- KAF04 that were averaged and used to make main-text Figure 1. The layout of data panels is the same as in Fig 1, but without the example CAP waveforms. **Column 1:** CAP amplitudes evoked by tone bursts with frequencies 2–16 kHz and sound levels in 10 dB steps at and up from the level that evoked 40 μ V CAPs (color key at top). CAP amplitudes were normalized so that the average over the 10 minutes before the perfusion start was 100%. **Column 2:** The difference between successive CAP amplitudes (Δ CAP) from the data in Column 1. **Column 3:** T_{50} 's from the data in Column 1, relative to the T_{50} at the lowest level (ΔT_{50}). Positive values indicate a basal shift and negative values indicate an apical shift relative to the T_{50} of the level that evoked 40 μ V CAPs

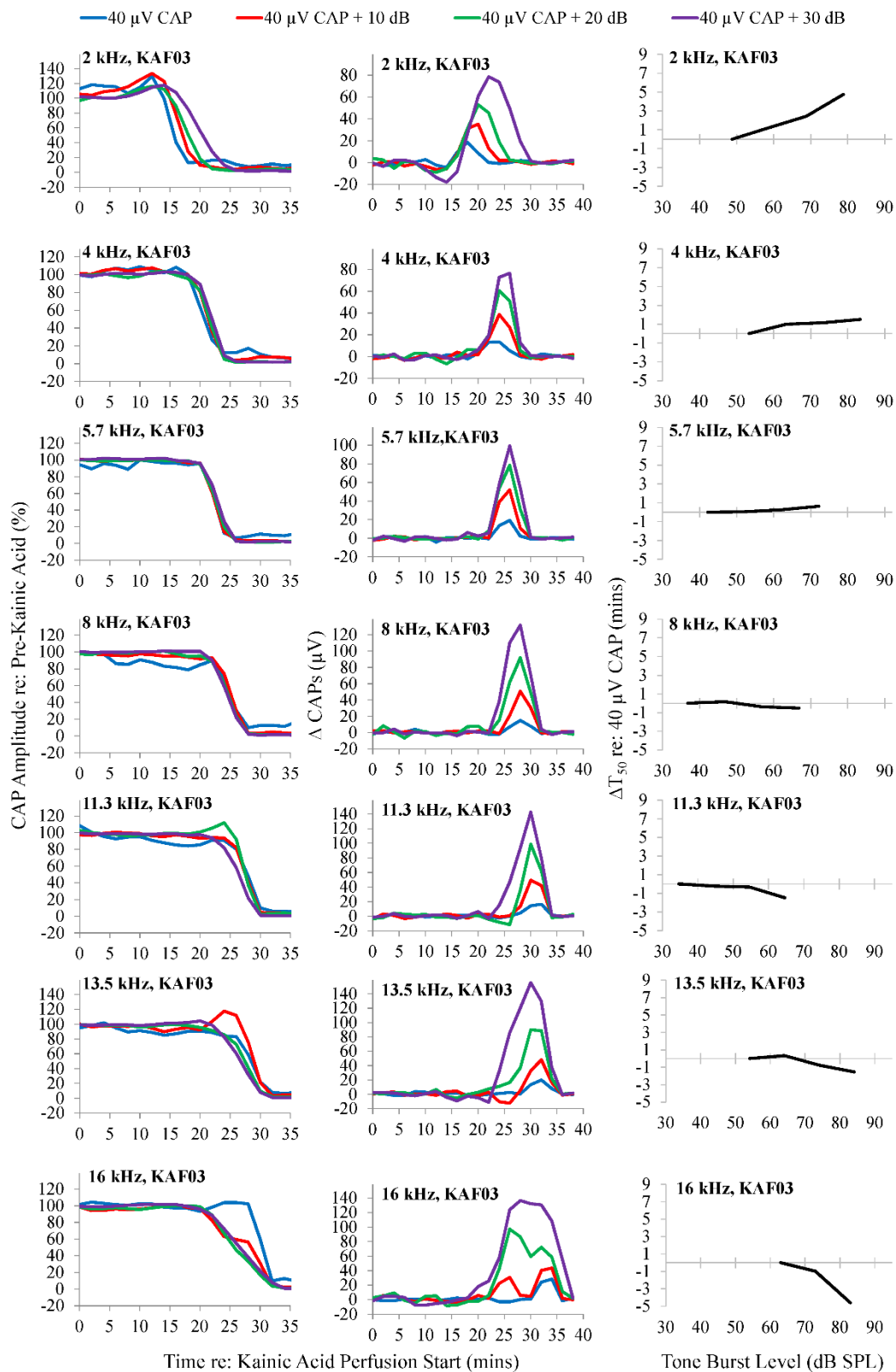
Supplementary material (Figure S1A: Guinea pig KAF01)



Supplementary material (Figure S1B: Guinea pig KAF02)



Supplementary material (Figure S1C: Guinea pig KAF03)



Supplementary material (Figure S1D: Guinea pig KAF04)

