Supplemental information

Spike transmission failures in axons

from cortical neurons *in vivo*

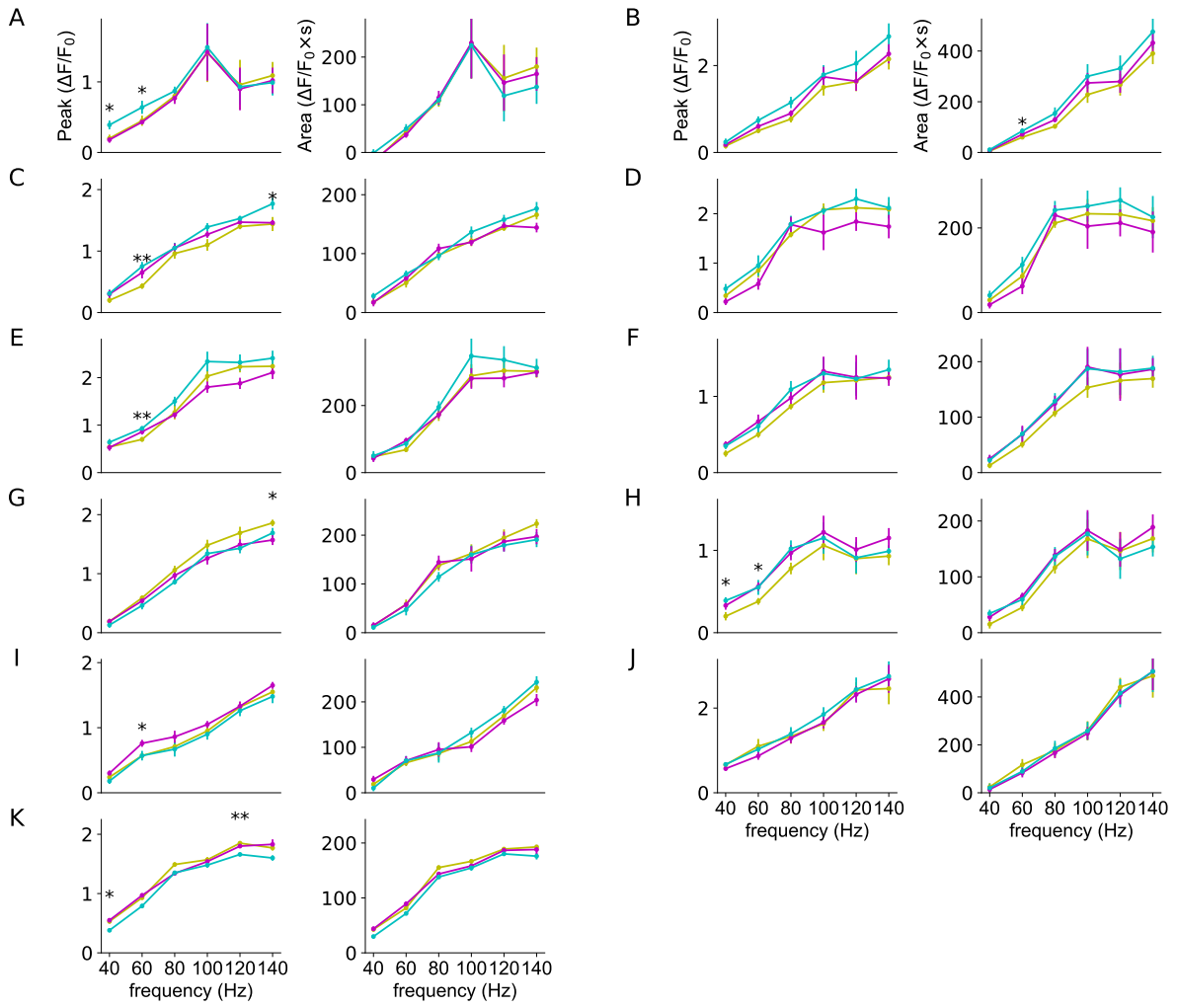Netanel Ofer, Victor Hugo Cornejo, and Rafael Yuste

Figure S1: **Spike propagation at different branch points.** A-J: Examples of reliable propagation in both peak (left columns) and integrated calcium fluorescence (right columns). The statistical definition of propagation or failure is explained in the text. The parent branch is in yellow, secondary branches are in cyan and magenta. Data are represented as mean±SEM. Asterisks indicate statistical significance differences between the three branches; Kruskal-Wallis H-test. Related to Figure 3.
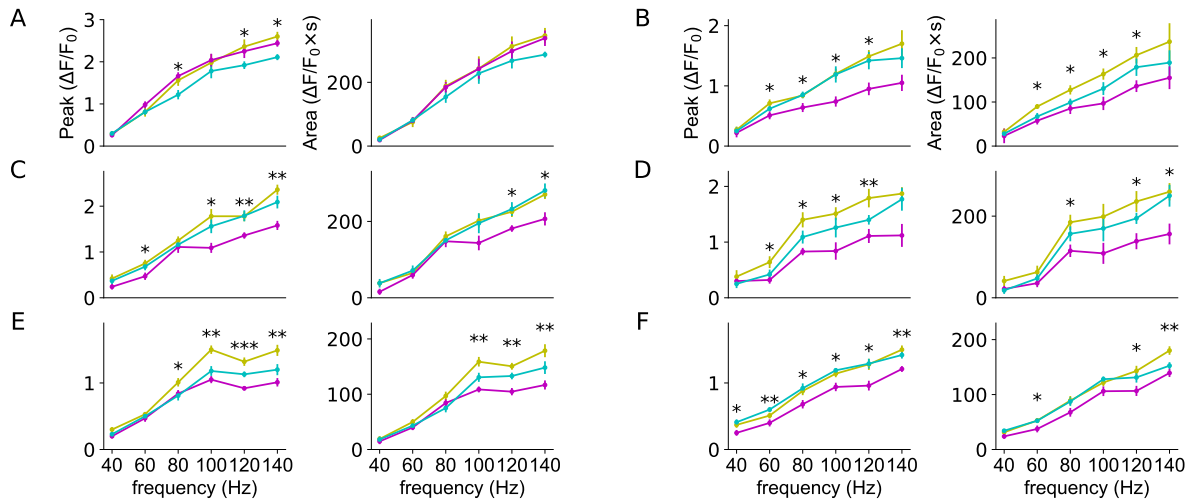
Figure S2: **Spike failures at different branch points.** A-F: Examples of high-frequency propagation failures in both peak (left columns) and integrated calcium fluorescence (right columns). The statistical definition of propagation or failure is explained in the text. The parent branch is in yellow, secondary branches are in cyan and magenta. Data are represented as mean±SEM. Asterisks indicate statistical significance differences between the three branches; Kruskal-Wallis H-test. Related to Figure 4.