

Expanded View Figures

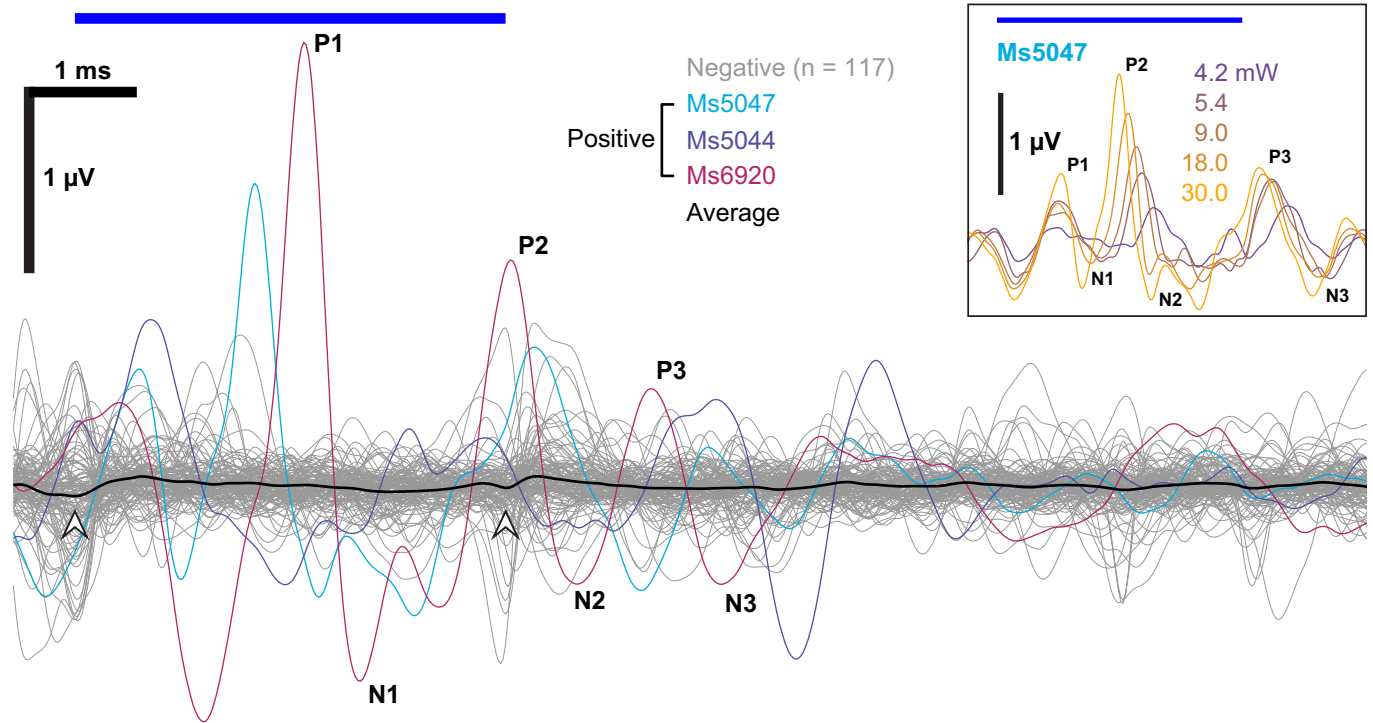


Figure EV1. Demonstrating functional expression of Chronos in SGNs following transuterine AAV2/6 injection reported by recordings of oABRs.

In 3 out of dozens of animals, we could record oABRs using fiber-coupled laser stimulation 4–12 weeks after embryonic transuterine injection of AAV2/6 carrying Chronos using 4 ms pulse train at 10 Hz with 30 mW radiant flux. Responses were verified as oABRs by the increasing amplitude with stronger light pulses (inset: shows oABRs of an exemplary oABR-positive mouse for varying radiant flux, colors code the radiant flux in mW). A small onset and offset artifact (arrowheads) is visible for the average (black) of the negative animals (gray) which we occasionally observed in the early phase of the project.

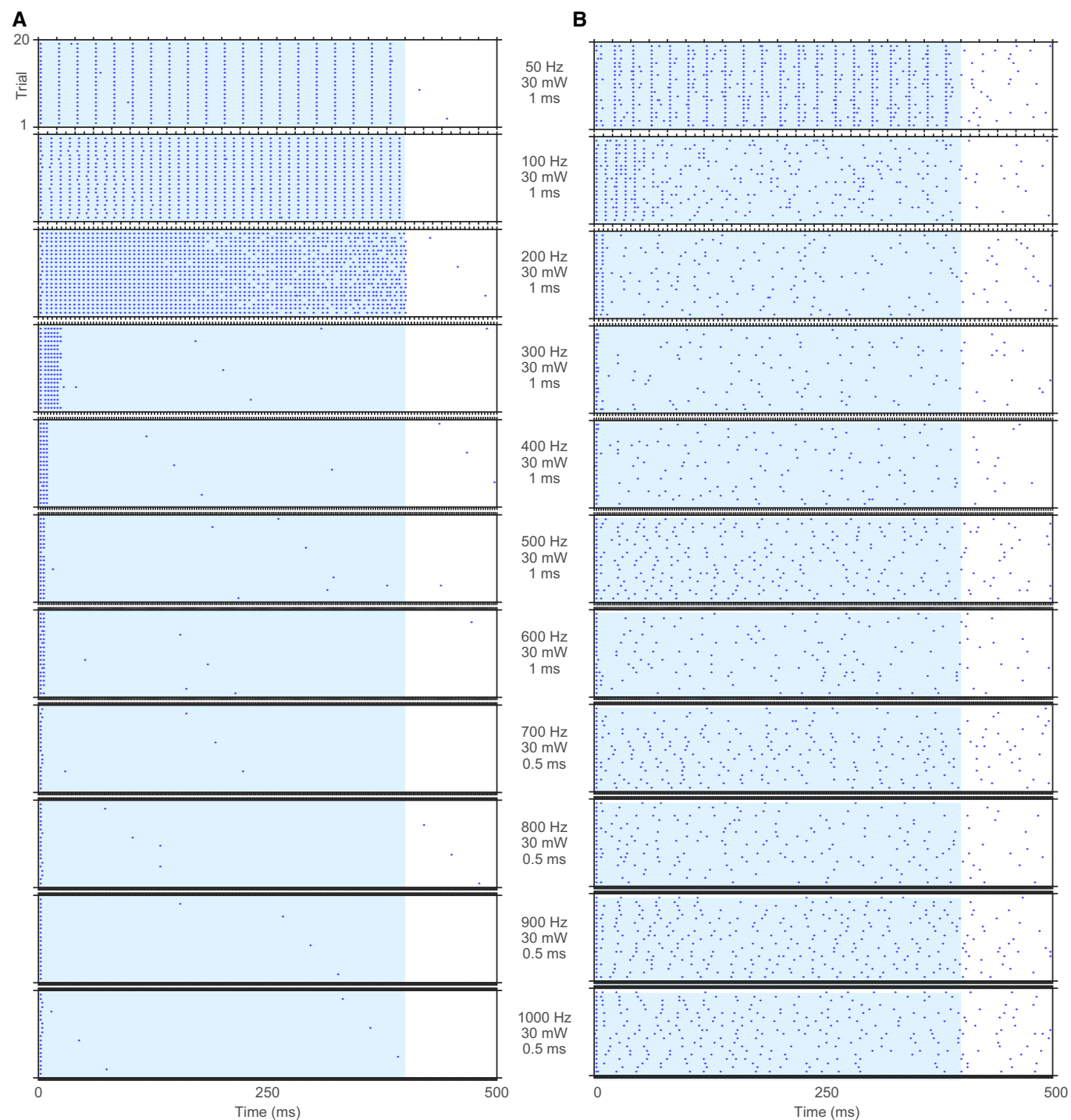


Figure EV2. Activity of two exemplary putative SGNs upon light stimulation at increasing repetition rates.

A Raster plot showing spike timing (blue symbols) of a rapidly adapting putative SGN in response to 400-ms pulse trains at stimulation rates 50–1,000 Hz (30 mW, 1 ms for 50–600 Hz; 30 mW, 0.5 ms for 700–1,000 Hz).

B Raster plot showing activity of a slowly adapting putative SGN in response to the stimulation paradigm described in (A).