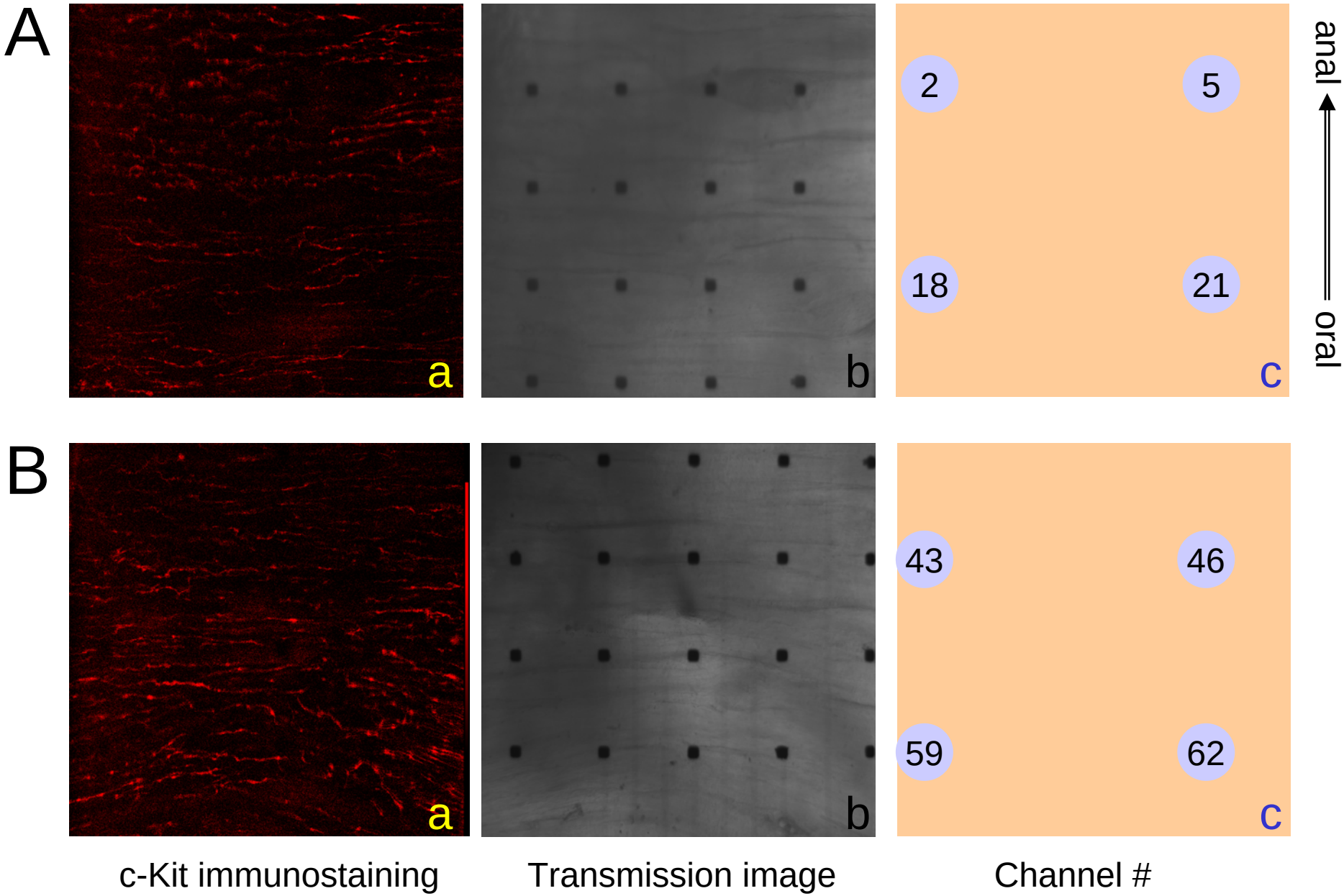
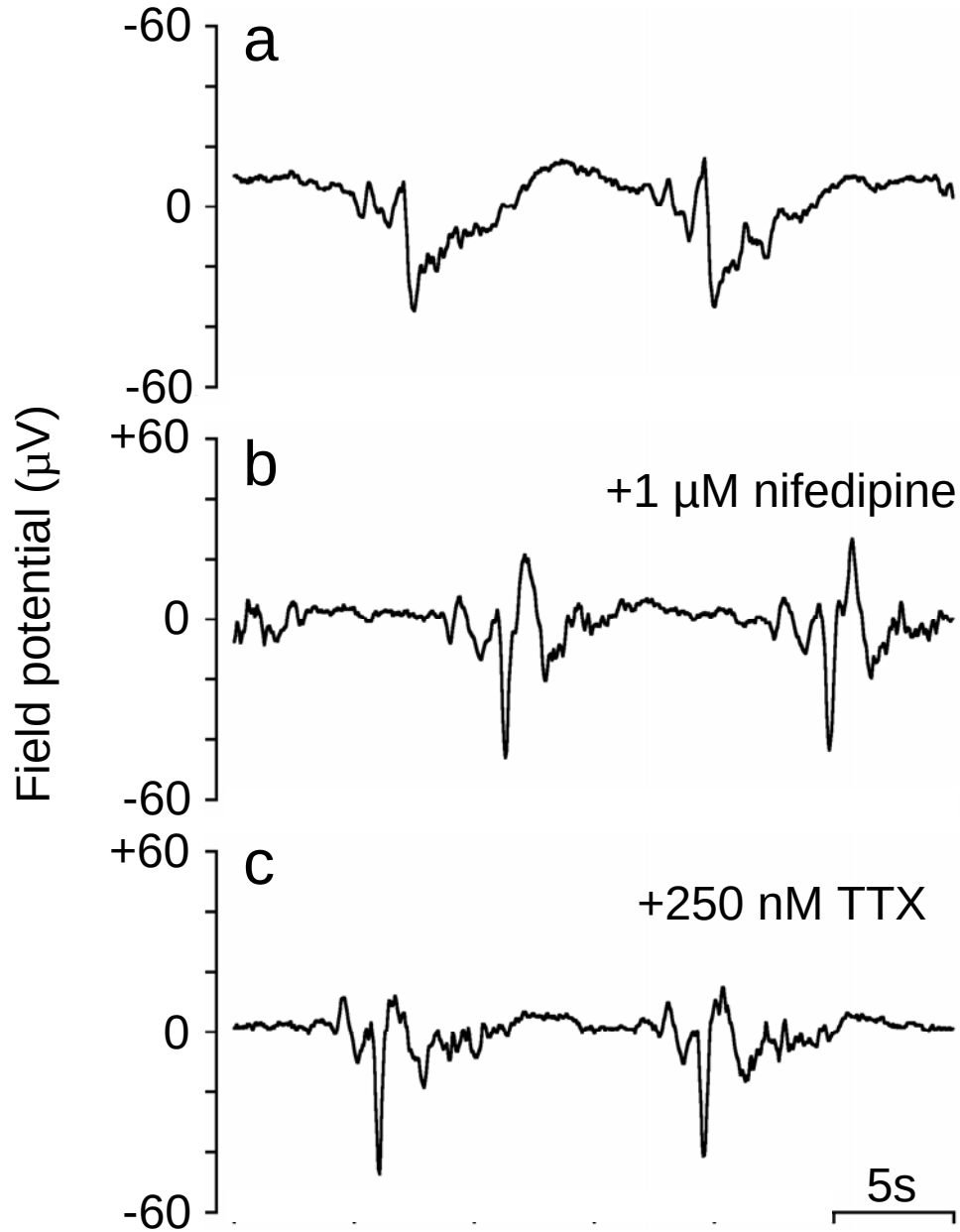
Figure S1


A
a
b
2
5
18
21
c
anal
oral
B
a
b
43
46
59
62
c
c-Kit immunostaining
Transmission image
Channel #

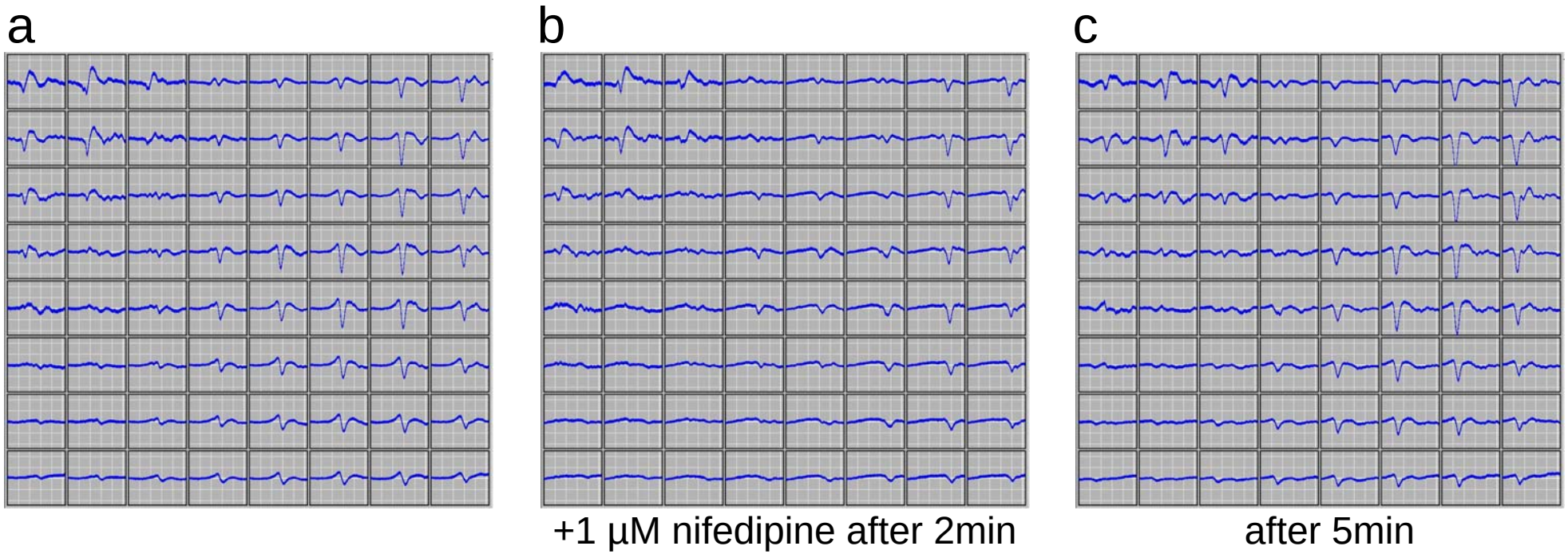
Supplemental Figure 1. Histological examinations in two recording regions A and B in the same preparation used in Figure 3. Transmission (a) and immunostaining images (b) were obtained using a confocal microscope. In (b) phycoerythrin (PE)-conjugated anti-c-Kit antibody (ACK2) was applied to demonstrate c-Kit-immunopositive cells running along the circular muscle. The number of electrode is indicated in (c).

Figure S2



Supplemental Figure 2. The field potentials recorded at Ch14 in the same stomach muscle preparation used in Fig. 3, are shown expanded. The trace (a) was recorded in normal solution. The traces in (b) and (c) were obtained in the presence of 1 μM nifedipine, and additional presence of 250 nM TTX. The shape of the slow component was changed after the application of nifedipine in a limited region of this preparation. No significant change in the noise level.

Figure S3



Supplemental Figure 3. An example of spontaneous electrical activity recorded using an array of 8 x 8 microelectrodes. The set of field potentials in (a) were recorded in normal solution, while those in (b) and (c) were recorded in the presence of nifedipine (1 µM). After application of nifedipine for 2 min, only a small change in the slowly decaying component (e.g. Ch. 2) was observed with little change in the noise level. The propagation velocity and direction of spontaneous electrical activity clearly changed during application of nifedipine.