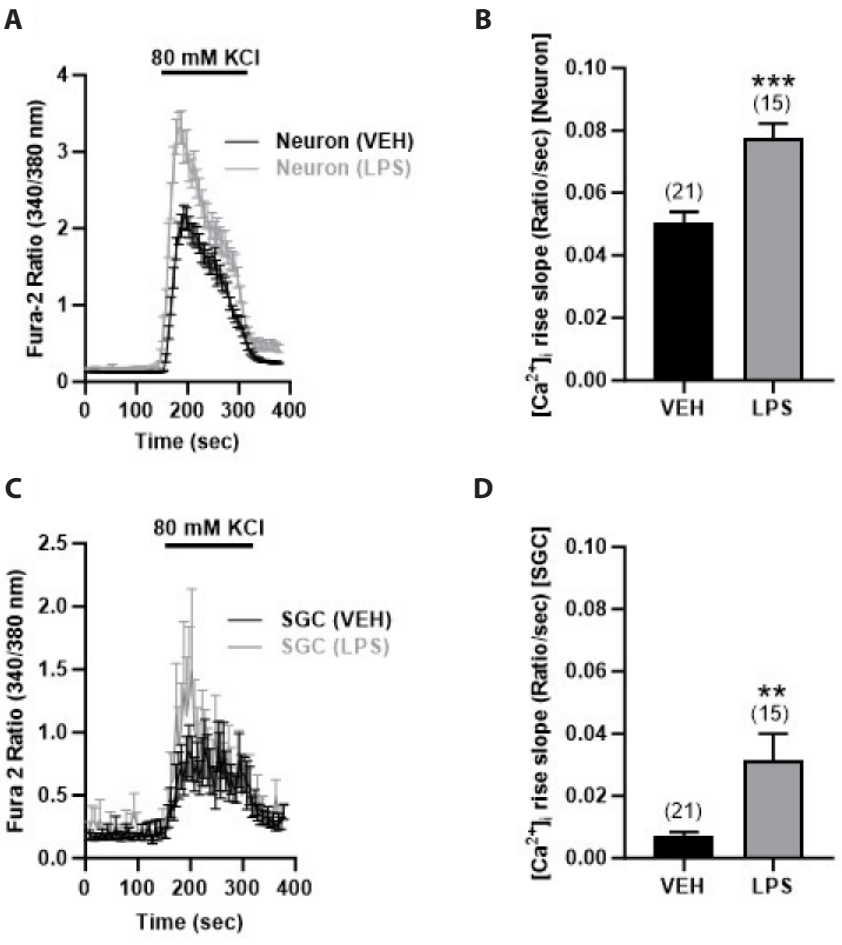
SUPPLEMENTARY DATA

Supplementary methods

Measurement of intracellular Ca^{2+}

In some experiments (for Supplementary Fig. 1), the initial kinetic rate of calcium influx was calculated as the $[Ca^{2+}]_i$ rise slope (ratio/sec) [1,2]. The $[Ca^{2+}]_i$ level was calculated as the difference in the peak Fura-2 AM ratio following 80 mM KCl treatment and the basal Fura-2 AM ratio ($R_{KCl\,peak} - R_{basal}$). Then, the initial rate of KCl-induced calcium influx was calculated as the slope representing Ca^{2+} influx during the initial 30 sec following 80 mM KCl perfusion using the following formulus:

$$[Ca^{2+}]_i \text{ rise slope (ratio/sec)} = (R_{KCl\,peak} - R_{basal}) / 30 \text{ sec}$$



Supplementary Fig. 1. The effects of LPS on Ca^{2+} influx through VGCCs in SCG neurons. (A, C) High K^+ (80 mM)-induced increase in cytosolic Ca^{2+} in neurons and SGCs attached to the attendant neurons in culture. The relative concentration of cytosolic Ca^{2+} is expressed as a 340 nm/380 nm ratio. Twenty-four hours after LPS exposure (1 μg/ml), the high K^+-induced increase in cytosolic Ca^{2+} was significantly augmented in neurons and SGCs attached to the attendant neurons in culture. (B, D) Summary of the effects of LPS on high K^+-induced cytosolic Ca^{2+} increase in neurons and SGCs. Comparisons were made for the rising slope of cytosolic Ca^{2+} levels over time. The data are presented as means ± SEM. The number of the tested cells from three independent experiments is indicated in parentheses. Unpaired Student's t-test, $^{**}p < 0.01$, $^{***}p < 0.001$. LPS, lipopolysaccharide; VGCCs: voltage-gated Ca2+ channels; SCG, superior cervical ganglia; SGC, satellite glial cell.

REFERENCES

1. Park CY, Shcheglovitov A, Dolmetsch R. The CRAC channel activator STIM1 binds and inhibits L-type voltage-gated calcium channels. *Science*. 2010;330:101-105.
2. Ross DG, Smart CE, Azimi I, Roberts-Thomson SJ, Monteith GR. Assessment of ORAI1-mediated basal calcium influx in mammary epithelial cells. *BMC Cell Biol*. 2013;14:57.