

Supporting Information

Wong et al. 10.1073/pnas.1502057112

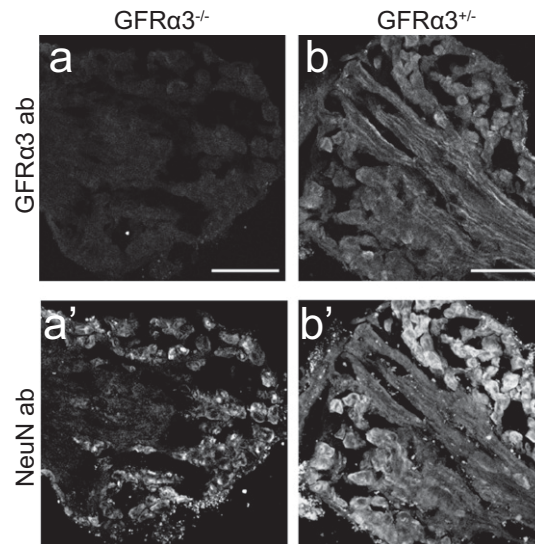


Fig. S1. (A and B) Cross-sections through DRGs of $GFR\alpha3^{-/-}$ mice and $GFR\alpha3^{+/+}$ littermates immunolabeled with the $GFR\alpha3$ antibody. $GFR\alpha3$ staining was widespread in the $GFR\alpha3^{+/+}$ DRG. In contrast, there was a complete lack of $GFR\alpha3$ staining in the DRG of the $GFR\alpha3^{-/-}$ mice, indicating that the $GFR\alpha3$ antibody is specific. (A' and B') Staining of the same DRG tissue with an antibody to NeuN. There was no decrease in the number of DRG neurons in $GFR\alpha3^{-/-}$ mice (1, 2). (Scale bars: 100 μm .)

1. Nishino J, et al. (1999) GFR alpha3, a component of the artemin receptor, is required for migration and survival of the superior cervical ganglion. *Neuron* 23(4):725–736.
2. Honma Y, et al. (2002) Artemin is a vascular-derived neurotrophic factor for developing sympathetic neurons. *Neuron* 35(2):267–282.

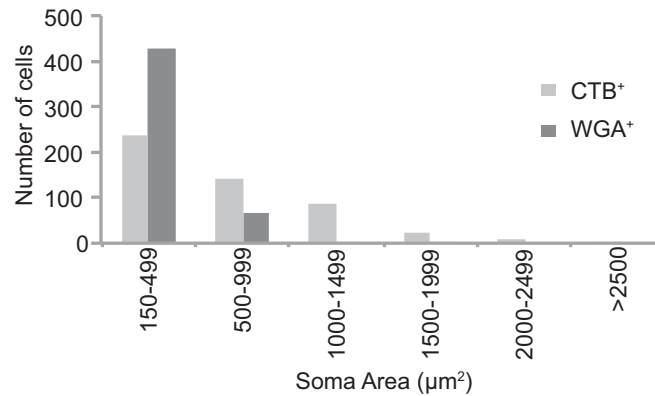


Fig. S2. Histogram showing the size distribution of CTB^+ and WGA^+ neurons ($n = 500$). The number of neurons in each 500- μm^2 bin was counted. Consistent with previous reports (1), CTB^+ cells were larger than WGA^+ cells on average.

1. LaMotte CC, Kapadia SE, Shapiro CM (1991) Central projections of the sciatic, saphenous, median, and ulnar nerves of the rat demonstrated by transganglionic transport of cholera-agenoid-HRP (B-HRP) and wheat germ agglutinin-HRP (WGA-HRP). *J Comp Neurol* 311(4):546–562.

Table S1. Primers (with sequences and melting temperatures) used for qPCR assays

Gene	Forward primer (5'-3')	T _m , °C	Reverse primer (5'-3')	T _m , °C
<i>GFRα3</i>	CCTTCTGAATGGAAGGTGAAGA	54.4	TGGAGACAGTGCTAGGAGTTA	54.7
<i>GAPDH</i>	CCCTTCATTGACCTCACTACA	54.4	GATGACCAGCTTCCCATTCT	54.6
<i>HPRT</i>	GACCTCTCGAAGTGTGGAT C	54.7	TCAAATCCCTGAAGTGCTCAT	54.1