

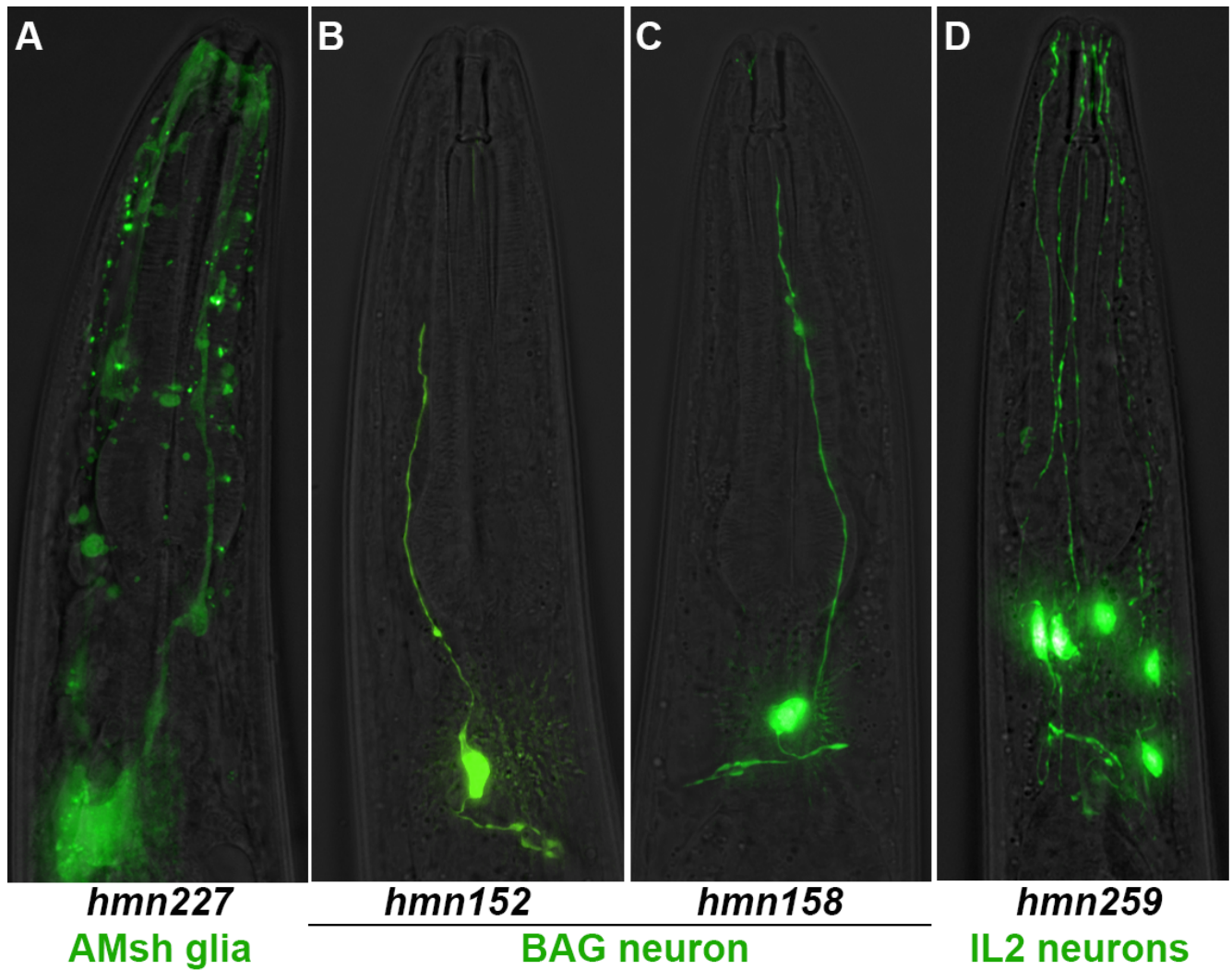
Supplemental Material

Loss of the extracellular matrix protein DIG-1 causes glial fragmentation, dendrite breakage, and dendrite extension defects

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Supplemental Figure S1

Tables S1-S3



Supplemental Figure S1. Isolation of mutants with altered glial or neuronal morphology.

Adult animals exhibiting phenotypes identified in the genetic screen: (A) amphid sheath glial fragmentation in *hmn227*; (B, C) BAG dendrite length defects in (B) *hmn152* and (C) *hmn158*; (D) IL2 dendrite fasciculation defects in *hmn259*.

Table S1. Strains used in this study

Strain	Genotype	Figure(s)
CHB1652	<i>dig-1(hmn227)</i> III; <i>hmnIs13</i>	1
CHB1166	<i>dig-1(hmn152)</i> III; <i>oyIs82</i> X	1
CHB2250	<i>dig-1(hmn158)</i> III; <i>oyIs82</i> X	1
CHB3008	<i>dig-1(hmn259)</i> <i>myIs13</i> III	1
CHB1549	<i>hmnIs13</i>	2
CHB4342	<i>dig-1(n1321)</i> III; <i>hmnIs13</i>	2
PY8503	<i>oyIs82</i> X	3
CHB4343	<i>dig-1(n1321)</i> III; <i>oyIs82</i> X	3
PT2762	<i>myIs14</i> IV	4, 5
CHB2940	<i>dig-1(n1321)</i> III; <i>myIs14</i> IV	4, 5
CHB2937	<i>myIs14</i> IV; <i>dyf-7(ns119)</i> X	5
CHB2944	<i>dig-1(n1321)</i> III; <i>myIs14</i> IV; <i>dyf-7(ns119)</i> X	5

Table S2. Transgenes used in this study

Transgene	Description	Reference
<i>hmnIs13</i>	<i>F16F9.3</i> pro:mCherry, <i>grl-2</i> pro:YFP, <i>gcy-8</i> pro:CFP	Mizeracka et al., bioRxiv 2019
<i>oyIs82</i>	<i>flp-17</i> pro:GFP, <i>unc-122</i> pro:dsRed	Gift of Astrid Cornils and Piali Sengupta
<i>myIs13</i>	<i>kpl-6</i> pro:GFP	Schroeder et al., Curr. Biol. 2013
<i>myIs14</i>	<i>kpl-6</i> pro:GFP	Schroeder et al., Curr. Biol. 2013

Table S3. Alleles generated in this study

Allele	Sequence
<i>dig-1(hmn152)</i>	CTGATGGT[C>T]AGATTCTT
<i>dig-1(hmn158)</i>	ATGGACAG[g>a]tacgatta
<i>dig-1(hmn227)</i>	ATGGACAG[g>a]tacgatta
<i>dig-1(hmn259)</i>	GGTTCAC[C>T]CAATAACA

Substitutions are bracketed. Uppercase corresponds to predicted exons; lowercase to predicted introns. *hmn158* and *hmn227* were isolated from independent screens but cause an identical nucleotide change.