



**Figure S3.** *ngn-1(ok2200)* animals show strong AIY neuron axon outgrowth defects that are epistatic to phenotypes seen in a panel of known axon guidance gene mutants (*daf-18*/PTEN, *sdn-1*/syndecan, *efn-4*/ephrin-4, and *mab-20*/semaphorin). These phenotypes are also epistatic to those seen in *cnd-1(ju29)*, a strong loss-of-function mutation in another proneural basic-helix-loop-helix transcription factor.  $n = 50$  for all strains scored apart from *cnd-1(ju29)* ( $n = 24$ ) and *ngn-1(ok2200); cnd-1(ju29)* ( $n = 38$ ).