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Supplemental information

Nuclear hormone receptors promote gut and glia detoxifying enzyme induction and protect *C. elegans* from the mold *P. brevicompactum*

Sean W. Wallace, Malcolm C. Lizzappi, Elif Magemizoğlu, Hong Hur, Yupu Liang, and Shai Shaham

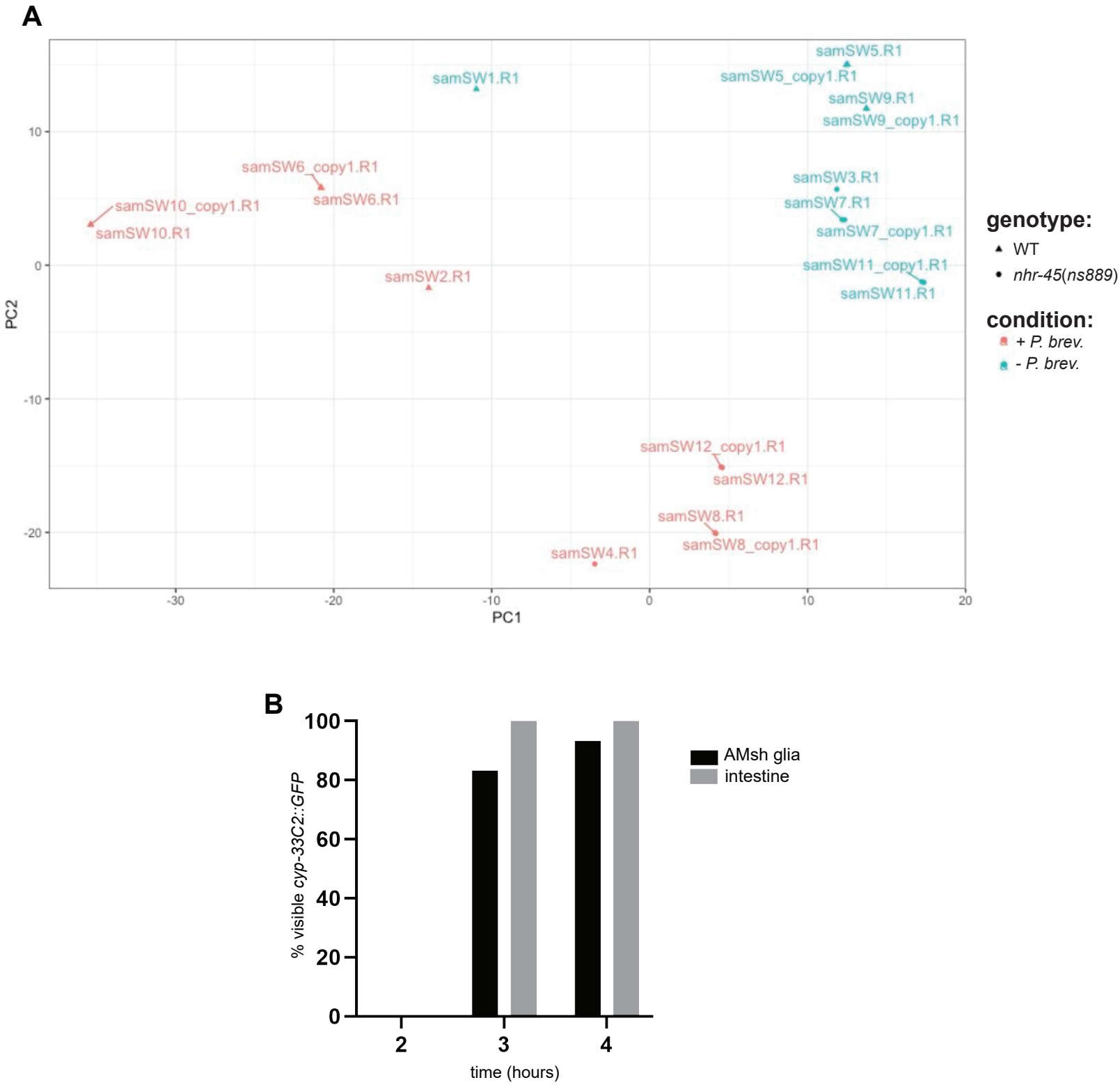

Figure S1. Related to Figure 1. (A) PCA analysis of RNAseq data. Genotypes and conditions for samples are as follows: samSW1, samSW5, samSW9 – WT without *P. brevicompactum* (3 replicates); samSW2, samSW6, samSW10 – WT with *P. brevicompactum* (3 replicates); samSW3, samSW7, samSW11 – *nhr-45(ns889); nsIs910* without *P. brevicompactum* (3 replicates); samSW4, samSW8, samSW12 – *nhr-45(ns889); nsIs910* with *P. brevicompactum* (3 replicates). 'copy' indicates that a sample was sequenced twice to increase the number of reads. (B) Induction of *cyp-33C2::GFP* in young adults acutely exposed to *P. brevicompactum*.

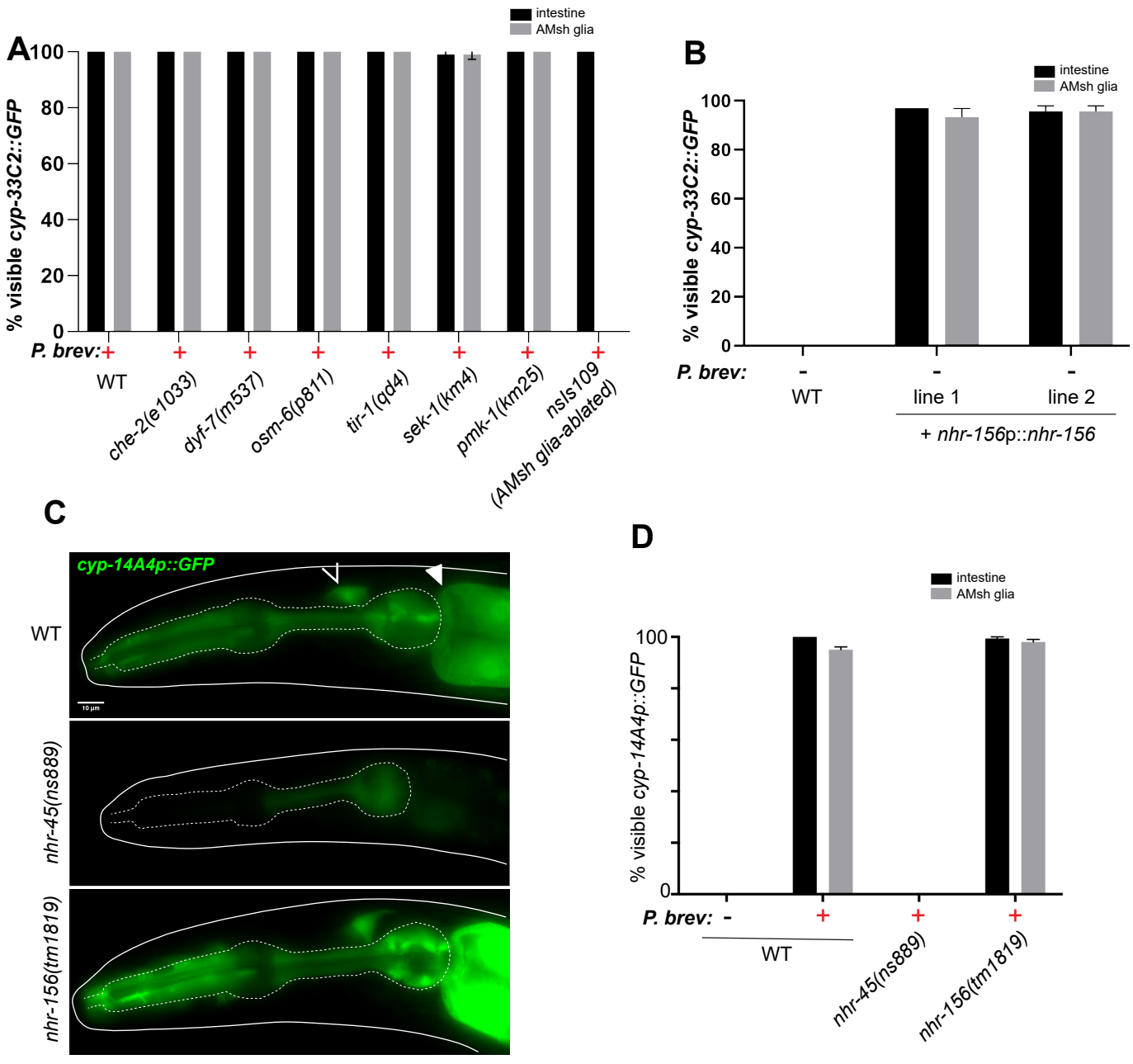

Figure S2. **Related to Figure 2.** (A) *cyp-33C2::GFP* induction following *P. brevicompactum* exposure in the indicated mutant strains. (B) Basal *cyp-33C2::GFP* expression in the indicated strains. (C) *cyp-14A4p::GFP* induction following *P. brevicompactum* exposure. Open arrowhead, AMsh glia. Closed arrowhead, intestine. (D) Quantification of mutant strains from (C).

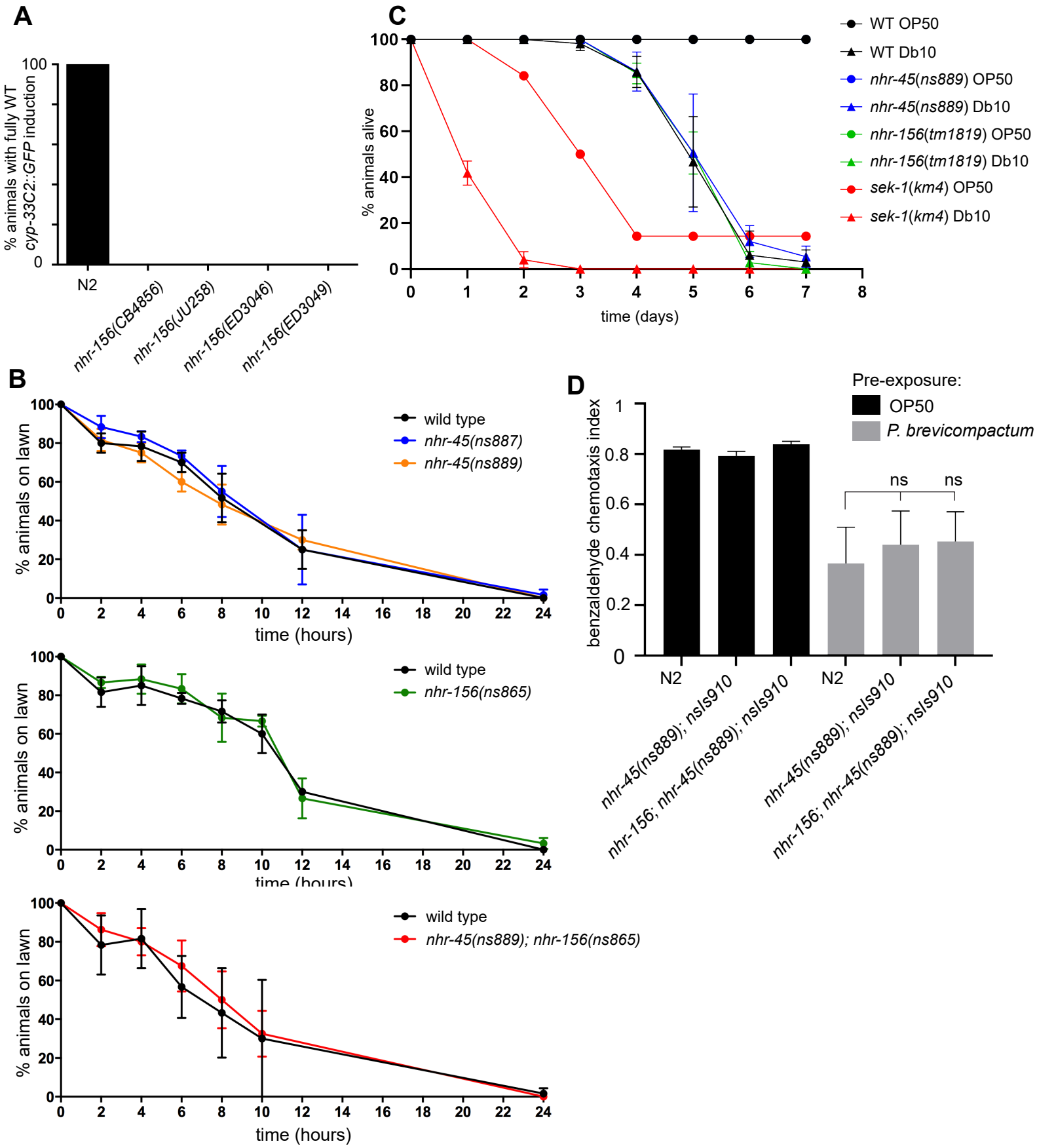

Figure S3. Related to Figure 4. (A) *cyp-33C2::GFP* induction by *Serratia marcescens* Db10 in AMsh glia was quantified by scoring the percentage of animals that show fully wild-type levels of expression. Genotypes refer to representative F2 recombinant lines that were generated by crossing *cyp-33C2::GFP* from N2 into the indicated isolates. (B) *Serratia marcescens* Db10 lawn-leaving assays for the indicated genotypes. (C) *Serratia marcescens* Db10 killing assays for the indicated genotypes. (D) Effect of pre-exposure to *P. brevicompactum* on benzaldehyde chemotaxis. *nsIs910, elt-2p::nhr-45* (used to rescue the toxicity phenotype observed when *nhr-45* mutants are grown in the presence of *P. brevicompactum*).