

Supplementary Materials: Characterization and Functional Importance of Two Glycoside Hydrolase Family 16 Genes from the Rice White Tip Nematode *Aphelenchoides besseyi*

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Table S1. GH genes survey in *Aphelenchoides besseyi* transcriptome data.

GHs	Transcript ID	E-value
GH2	trans117704_10_47-1081	1.00×10^{-45}
GH2	trans679_10_1-1425	7.20×10^{-64}
GH13	trans794_19_3-1889	2.20×10^{-128}
GH16	trans152380_4_1-207	2.50×10^{-6}
GH16	trans32403_1_2-244	2.30×10^{-8}
GH16	trans7912_10_102-1073	3.60×10^{-20}
GH18	trans168_7_148-990	4.40×10^{-37}
GH19	trans1382_5_3-800	8.10×10^{-42}
GH20	trans113061_12_3-1928	1.40×10^{-28}
GH20	trans1978_11_210-1763	4.10×10^{-22}
GH20	trans3367_16_93-1748	6.60×10^{-81}
GH29	trans3842_11_21-1463	1.70×10^{-96}
GH30	trans117090_10_1-1596	4.10×10^{-152}
GH30	trans125092_10_3-1589	1.50×10^{-148}
GH31	trans4754_18_1-2748	9.50×10^{-152}
GH35	trans114947_13_86-2071	2.20×10^{-103}
GH35	trans124383_7_2-568	8.00×10^{-46}
GH37	trans120565_17_3-1877	4.00×10^{-162}
GH38	trans116548_13_4-1611	7.00×10^{-57}
GH38	trans8134_31_573-3653	3.10×10^{-59}
GH45	trans123487_5_2-538	3.90×10^{-76}
GH47	trans113602_22_314-2146	9.40×10^{-150}
GH47	trans3198_12_16-1710	6.20×10^{-147}
GH47	trans3658_22_101-3109	1.90×10^{-138}
GH56	trans122501_7_2-805	2.60×10^{-66}
GH85	trans7967_9_5-1405	9.90×10^{-67}
GH99	trans115030_16_242-1630	4.10×10^{-120}
GH109	trans114061_12_444-1505	2.50×10^{-7}
GH109	trans119448_8_62-1099	4.10×10^{-12}
GH109	trans2441_5_2-700	9.40×10^{-12}

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Table S2. Primers used in this study.

Primer ID	Primer Sequence (5'-3')	Aim For
GH16NJ-F1	CGACGATGCTTCTATTGCT	
GH16NJ-R1	CAATAACAACACAGTCTCTC	
GH16NJ-F2	GGACAATGCGGAACCTGGAGTGC	
GH16NJ-R2	CGCCATGTAGACACCACCCCTCT CTAATACGACTCACTATAGGG-	RACE-PCR for AbGH16-1
UPM	CAAGCAGTGGTATCAAC- GCAGACT (long); CTAATAC- GACTCACTATAGGGC (short)	
NUP	AAGCAGTGGT AACAAACGCAGAGT	
GH16NJ-F.full	ACATGGGGACGACGATGCT	Full length of AbGH16-1
GH16NJ-R.full	CACTGCTTGAATTGATTAA	
qGH16NJ-F	ACAGTGCATTGAATGCCA	qPCR for AbGH16-1
qGH16NJ-R	TTGAGGATATTGCCGCCAGA	
qAb18S-F	TGCGGTAATTCTGGAGCCAA	qPCR (reference gene)
qAb18S-R	CCCGTTAGAACCATGGCAGT	
GH16NJ-21T.F	CATGCCATGGCTTATCAGTT- GGTCGACAACATATCA	
GH16NJ-21T.R	CATGCTCGAGTTATTCTTATA- GATTGAGTGAATTGATCAAC- CAA	Plasmids construction for protein ex- pression
GH16R1-21T.F	CATGCCATGGCTTATCGCTT- GGTCGACAATTACACA	
GH16R1-21T.R	CATGCTCGAGTTAGTTGAA- TAAACTTCAGCGAATTGA	
GH16NJ-F3	GGACAATGCGGAACCTGGAG	ISH/ RNAi for AbGH16-1
GH16NJ-R3	AGCTGCCAGACATTGAGGAT	
GH16NJ-T7.F3	T7 adapter- GGACAATGCGGAACCTT- GGAG	RNAi for AbGH16-1
GH16NJ-T7.R3	T7 adapter- AGCTGCCAGACATT- GAGGAT	
GH16R1-F	GCGAATCCAATCACAGGCA	ISH/qPCR/RNAi for AbGH16-2
GH16R1-R	CGACAAACACGCAGACCTATG	
GH16R1-T7.F	T7 adapter- GCGAATCCAATCACAGGCA	RNAi for AbGH16-2
GH16R1-T7.R	T7 adapter- CGACAAACACGCAGAC- CTATG	
GFP-F	GGTGATGCAACATACGG	
GFP-R	TGGTTGTCTGGTAAAAG	
GFP-T7.F	T7 adapter- GGTGATGCAACAT- ACGG	RNAi (control)
GFP-T7.R	T7 adapter- TGGTTGTCTGGTAAAAG	