

S1 Table. Primers used to amplify *Aphelenchoides besseyi* cDNA and genomic DNA*.

Primer	Sequence (5' → 3')	Description
988F	CTCAAAGATTAAGCCATGC	18S [1]
1912R	TTTACGGTCAGAACTAGGG	
M-1813F	CTGCGCGAGAGGTGAAAT	18S (modified from [1])
M-2646R	ACCTACTGATACTTGTACGACTTT	
ENG-1	TAYGTIATHGTIGAYTGGCA	Fragment amplification
ENG-2	GTICCRTAYTCIGTIACRAA	
GH45 ENG-1	ACIMGITAYTGGAYTGYTG	Fragment amplification
GH45 ENG-2	RCAICCRTTRAIAIDICCIAC	
Abe GH5-1-F	TGAAGTGAACCTTGGCAAGAAATGAAAATC	cDNA amplification
Abe GH5-1-R	GACTGATCATTAAACGAGCTTAACAACTG	
Abe GH45-2-F	CCAACAAAATGGTCAATT CATT	cDNA amplification
Abe GH45-2-R	CGTTCAACAATGACATTGTACTCTT	
Abe GH45-3-F	CCAACAAAAATGGTCAATT CATC	cDNA amplification
Abe GH45-3-R	GTTATTAACTGTCTGCACGAA	
FmGH5i-F	TCGCAATACAATCCTCAGAAG	Inverse PCR
FmGH5i-R	GAGTTAACCGTCGATAGAAGATG	
AbeFm-GH5-GSP-F	TACGTGATTGTTGATTGGCACGGAA	3'RACE
AbeFm-GH5-NGSP-F	CGATACCCATTGAAAGTCCGATT	
AbeFm-GH5-GSP-R	CCATTGGCGCATAGCATTGTAAA	5'RACE
AbeFm-GH45-GSP-F	TATTGGGACTGCTGCAAACCATCTT	3'RACE
AbeFm-GH45-GSP-R	TCCGCCGGTATTGGTAACCTGAAC	5'RACE
AbeRl-GH45-GSP-F	GCGGTATTGGGACTGTTGCAAG	3'RACE
AbeRl-GH45-GSP-R	GCAGCCGTTGAACAAGCC	5'RACE

AUAP	GGCCACCGCGTCGACTAGTAC	3'RACE and 5'RACE
Abe GH5-1-S-F	ATGCGAACCTCAGTGGGGTTT	Southern blot
Abe GH5-1-S-R	GTTCCGTATTGGTACAAATAAAG	
Abe GH5-1-ISH-F	TTCCACAATATGATGATACTACTCCAA	<i>In situ</i> hybridization
Abe GH5-1-ISH-R	GATCATTAAACGAGCTTAACAACTG	
T7- Abe GH5-1-ISH-F	<u>TAATACGACTCACTATA</u> GGGTCCACAATATGATGATACTACTCCAA	
T7- Abe GH5-1-ISH-R	<u>TAATACGACTCACTATA</u> GGGGATCATTAAACGAGCTTAACAACTG	

*The T7-promoter sequence to prepare DNA template for *in vitro* transcription is underlined.

Refernece:

1. Holterman M, van der Wurff A, van den Elsen S, van Megen H, Bongers T, Holovachov O, et al. Phylum-wide analysis of SSU rDNA reveals deep phylogenetic relationships among nematodes and accelerated evolution toward crown Clades. *Mol Biol Evol*. 2006;23(9):1792-800. doi: 10.1093/molbev/msl044. PubMed PMID: 16790472.