

Supplementary Material to “Multiple genes contribute to anhydrobiosis (tolerance to extreme desiccation) in the nematode *Panagrolaimus superbus*”

Table S1 - Nucleotide sequences of primers. pDNR-LibT7 primers were used to amplify kinase genes cloned in the pDNR-library. These amplicons contained T7 promoters at each end. Primers: actin, PER, GP114, si46, si76 and si86, were used for knockdown confirmation via RT-PCR. Primers 1 to 21 were used to clone the corresponding *P. superbus* sequences (see Table 1) via RT-PCR. Primers “All T7::primers from 1 – 21” were used to produce the corresponding amplicons with T7 promoters at each end.

Targets	strand	sequence (5'-3')
pDNR-LibT7	forward	<u>GGTAATACGACTCACTATA</u> GATACATTATA <u>CGAAGTTATCA</u>
	reverse	<u>GGTAATACGACTCACTATA</u> GATGACC <u>ATGTTCACTTACCTA</u>
actin	forward	GCCGGGCTTGTGAA <u>AAATTCT</u>
	reverse	TGT <u>CCGCATACCAAGGATACA</u>
PER	forward	CACATCCTGCACAT <u>TTTACGC</u>
	reverse	TGCAACGAAT <u>CAAGGACTCTG</u>
GP114	forward	CGGCATGTTGATT <u>TGGCAT</u>
	reverse	TTTGTGGGCAG <u>CTATCCTTT</u>
si46	forward	AAACTTCTGCTGA <u>ATCGTGGG</u>
	reverse	AGAAACAG <u>TTGAGACACCAGG</u>
si76	forward	GCAACTGATA <u>CAGCTCTCG</u>
	reverse	TTGA <u>ACTGCTGTTCTACCTGG</u>
si86	forward	GGGGCCAATT <u>GTATCAAGATC</u>
	reverse	AAAAAA <u>ATCACATAAAGAGTCAGA</u>
1	forward	GGTTT <u>TAGAGGGTGCCATGTA</u>
	reverse	AGTTTATT <u>GATTCCCAAAGCC</u>
2	forward	AGTTTGT <u>CAATACTGATTCTCC</u>
	reverse	GCAGGT <u>GTTGACCACTCATT</u>
3	forward	GGGTGTTGG <u>GAGATATGTCGT</u>
	reverse	ATATA <u>AGTCACAAACAAAAGATT</u>
4	forward	GGGT <u>ACTAAAGATGGGACAGA</u>
	reverse	AAGAAC <u>GAGTTTTCCAGTGCCA</u>
6	forward	GGGA <u>ATTAATTGATCGAGGG</u>
	reverse	GATT <u>TAAGCATGCTGGGATCAA</u>
7	forward	ACTAA <u>ATGATTAAGCTGGAAC</u>
	reverse	ATGTT <u>GCAGATGAAAGAGGTAC</u>
8	forward	GGTGCT <u>GGAAATCCTGTTGAT</u>
	reverse	AAAGGAG <u>ATTAACAGCCATATC</u>
9	forward	GTCTT <u>GCTGGTGGTGA</u>
	reverse	GAGAA <u>ACGAATTGCCTTGATG</u>
10	forward	GGGG <u>ATCATTATTGACTTTATT</u>
	reverse	AGAT <u>ACAAAGAAACCCGATAAA</u>
11	forward	TGT <u>CTTCGACGAGATATTCTG</u>
	reverse	TTT <u>CGACTAATTCAATTATTCA</u>
15	forward	GTAA <u>ATCAGCATCGAGGAATC</u>
	reverse	GAAT <u>GAATTATGAACGATGGCT</u>
16	forward	AAGAT <u>GGCACGTCGTTATGAC</u>
	reverse	CAGAAC <u>AGTTTCGCATCAAGA</u>
17	forward	GGGG <u>AATTCACTTACCTC</u>
	Reverse	GAGTT <u>CTGGAACATTCTTCACT</u>
21	Forward	TTAT <u>TCGTTGTACTTTCTTC</u>
	Reverse	CAGAG <u>AGAAATTACTGGCTTC</u>
All T7::primers from 1 - 21	Forward	Add at 5': <u>GGTAATACGACTCACTATA</u> G-primer sequence
	Reverse	Add at 5': <u>GGTAATACGACTCACTATA</u> G-primer sequence