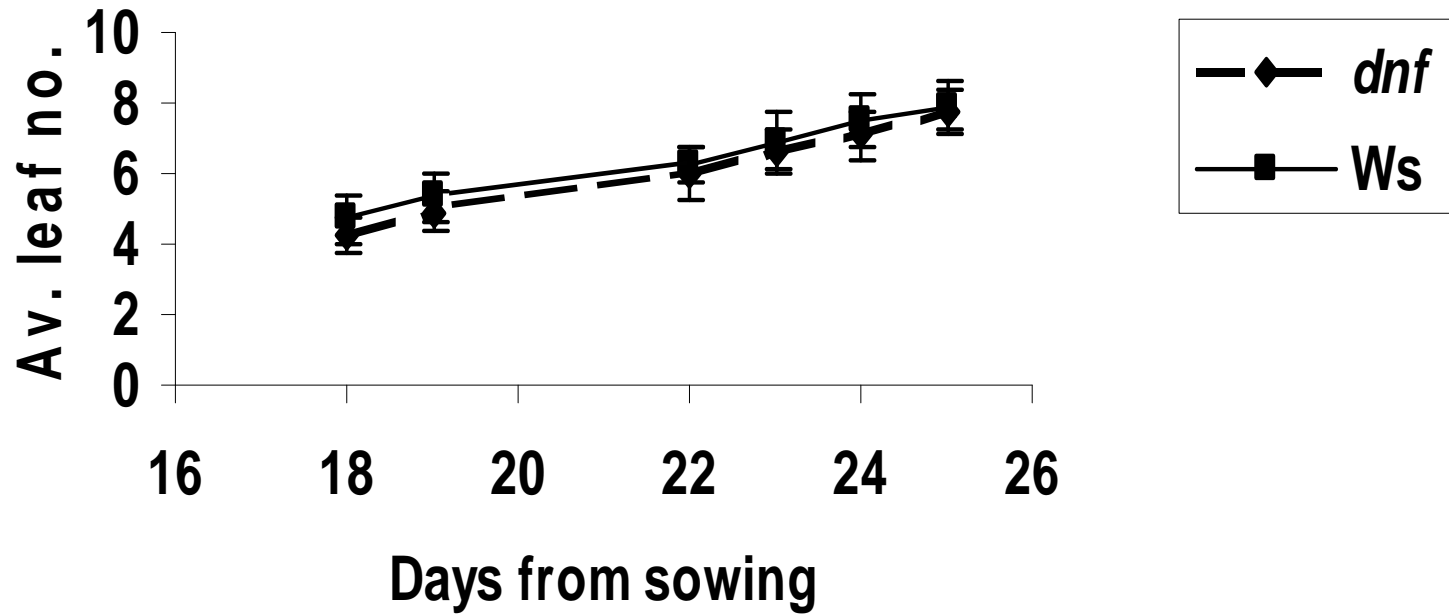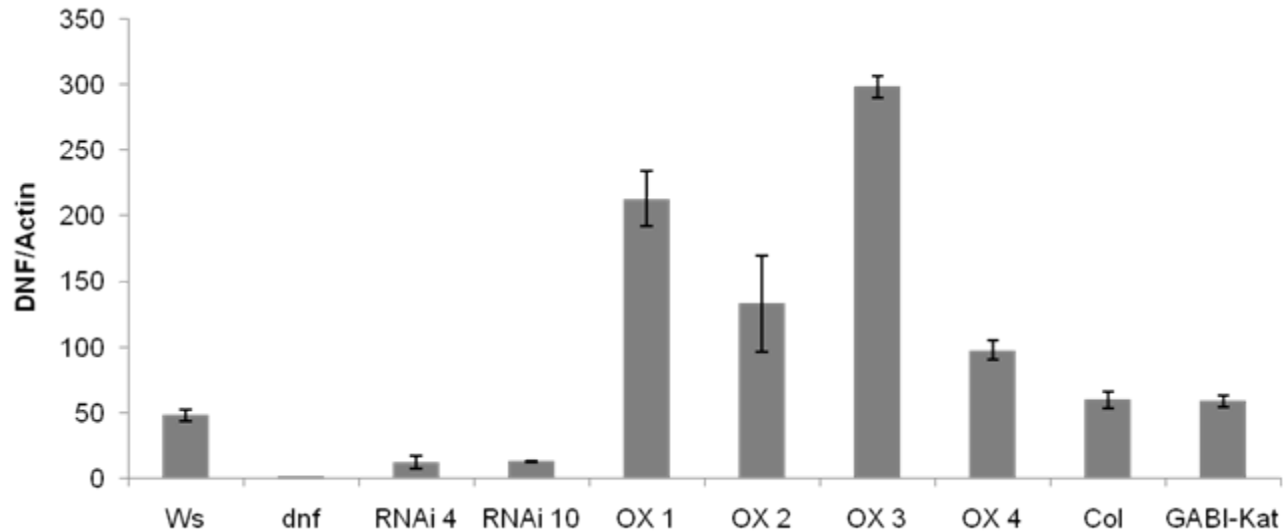**Supp. Fig. 1**

Supp. Fig. 1

Rate of leaf production in Ws and *dnf* mutant plants grown in SD.
Error bars show standard deviation, n=5

Supp. Fig. 2

Supp. Fig. 2

DNF expression in RNAi and over-expressing lines, and the GABI-Kat insertion line in 8h SD.

Levels of *DNF* expression in SD at ZT=5 in RNAi lines (RNAi4 and RNAi10) and over-expressing lines (OX1-4) compared to Ws and the *dnf* mutant. Also shown are levels of *DNF* expression in the GABI-Kat line 857H08, which is in the Columbia background, compared to that in WT Columbia. Error bars represent standard deviation.
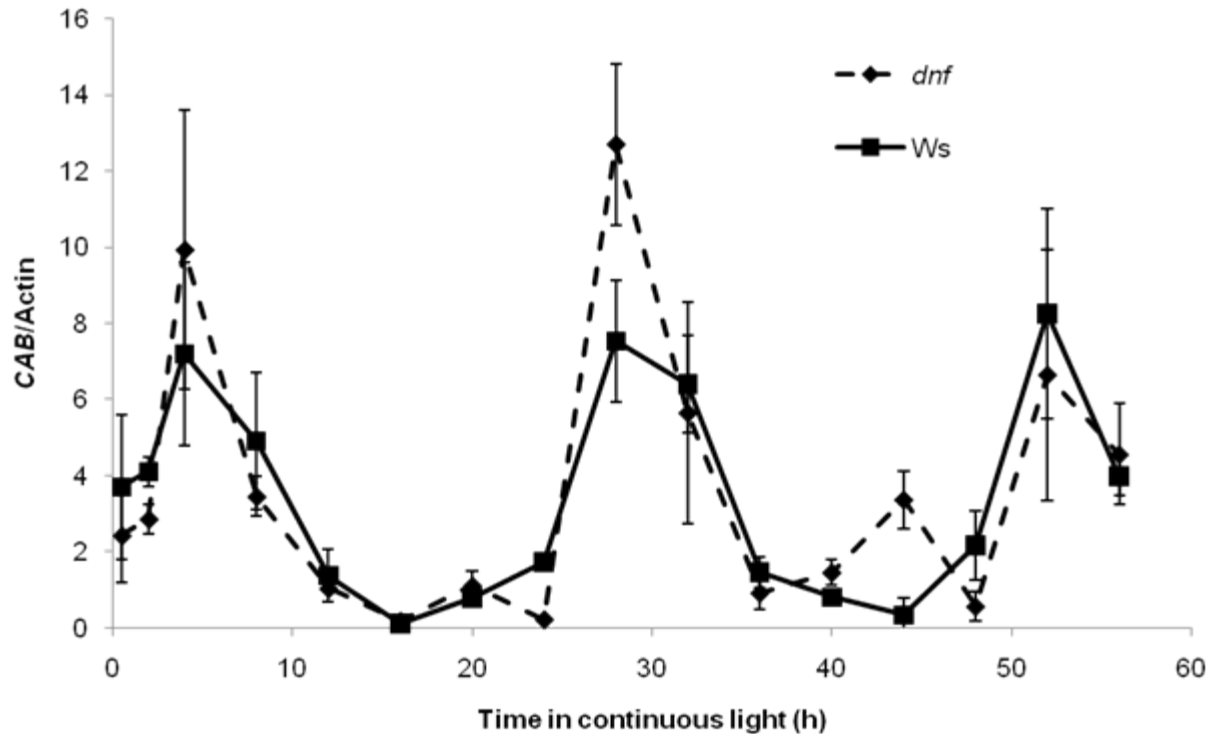
Supp. Fig.3
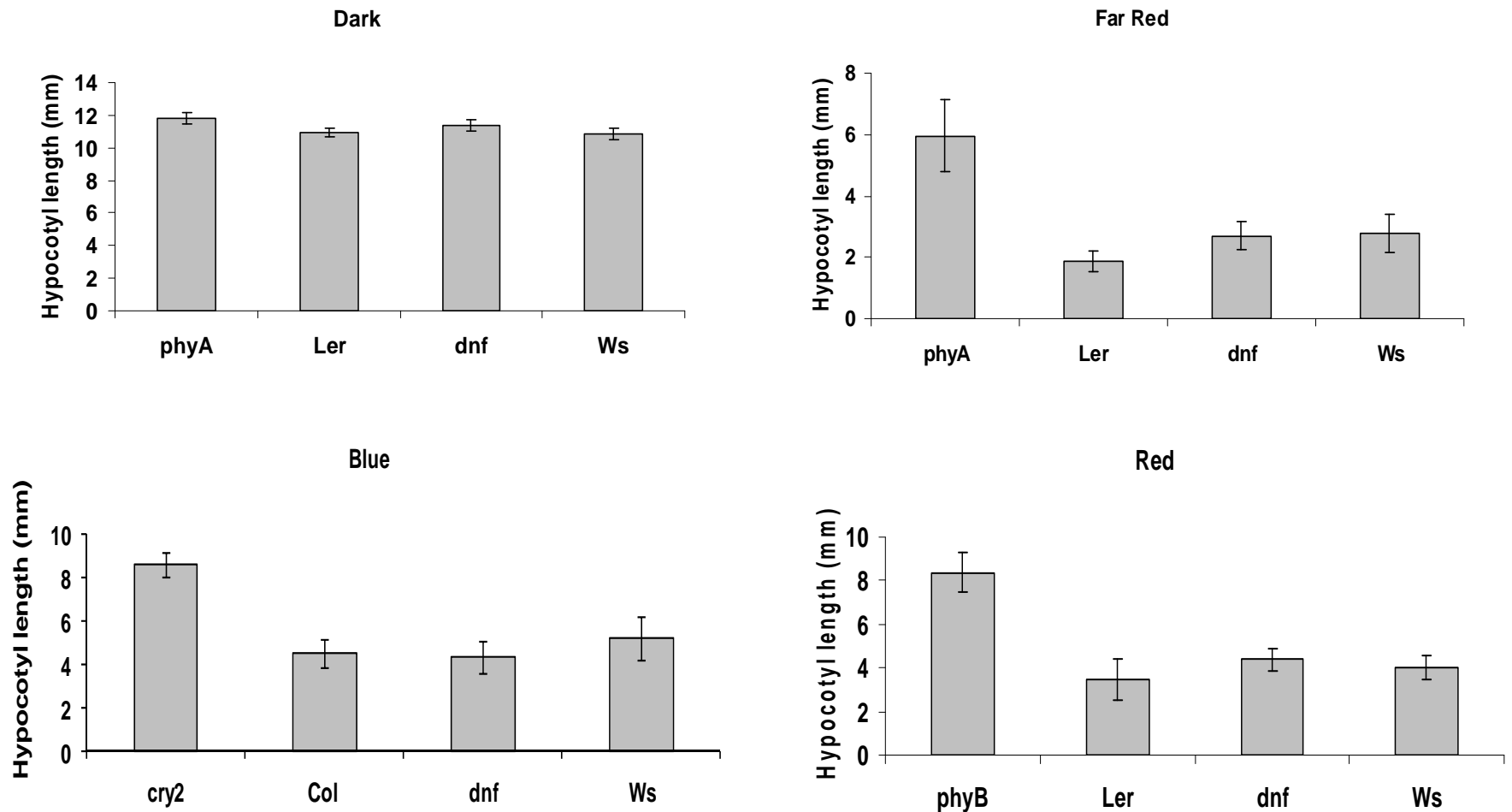
Supp. Fig.3. Hypocotyl elongation of Ws and *dnf* mutant plants in different light qualities.
Ws and *dnf* mutant plants were grown under single wavelength continuous red($2.5\mu molm^{-2}s^{-1}$), far-red ($0.1\mu molm^{-2}s^{-1}$), or blue ($0.4\mu molm^{-2}s^{-1}$) light as well as in the dark. The *phyA, phyB* and *cry2* mutants together with their respective WT ecotypes were included as controls. Error bars show standard deviation, n=20.
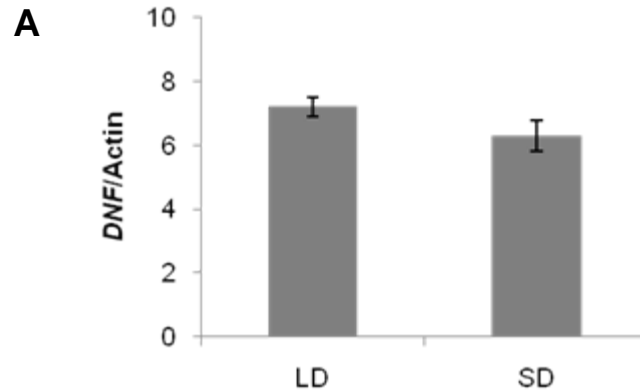
Supp. Fig.4


Supp. Fig.4. Analysis of circadian *CAB* expression.
Expression of *CAB* in Ws and *dnf* mutant plants was measured following transfer of plants from daily 8h light 16h dark cycles to constant light at time 0. Expression was normalised to β-*Actin*. Data points represent an average of 2 experimental replicates each with 3 technical replicates. Error bars show standard deviation.

Supp. Fig.5 **A**


Supp. Fig.5A. *DNF* expression at ZT5 in LD and SD.
Expression of *DNF* in Ws at the ZT5 timepoint in LD and SD showing that expression levels are similar at this time of day. Data points represent an average of 2 experimental replicates each with 3 technical replicates. Error bars represent standard deviation.

B
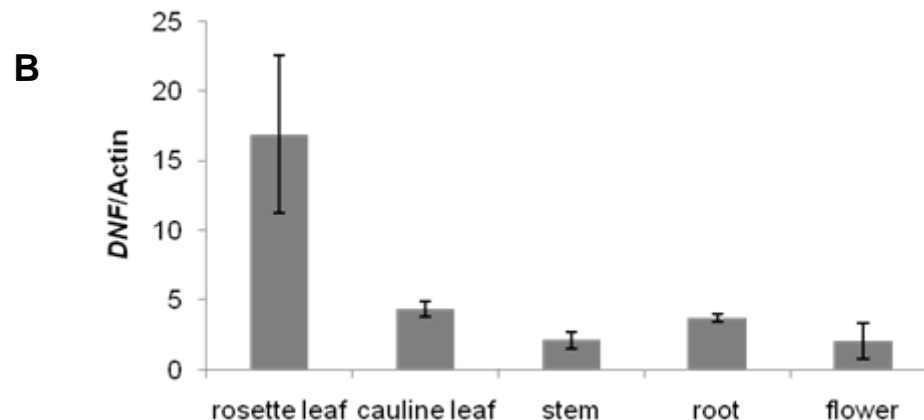
Supp. Fig.5B. *DNF* expression at ZT5 in SD in different tissues.
Expression of *DNF* in Ws at the ZT5 timepoint in different tissues in SD. Data points represent an average of 2 experimental replicates each with 3 technical replicates. Error bars represent standard deviation.
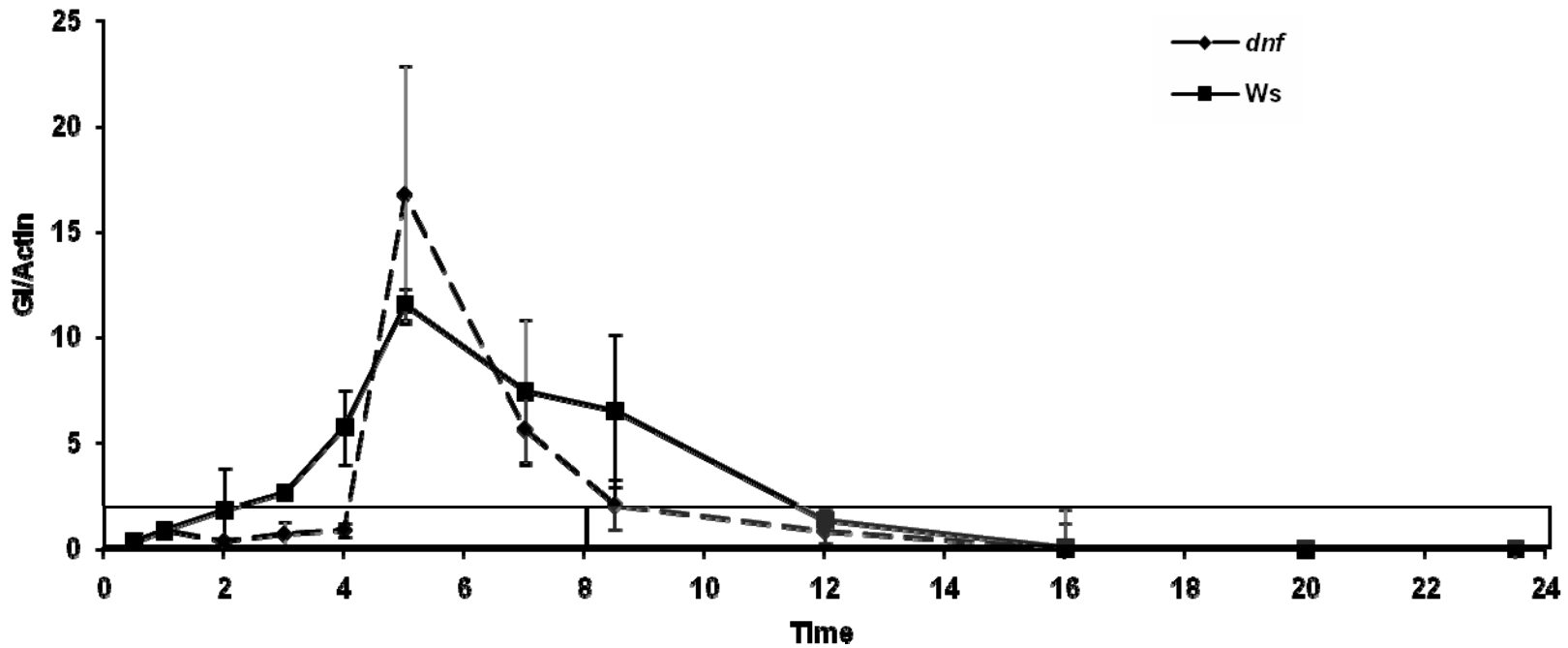
Supp. Fig.6
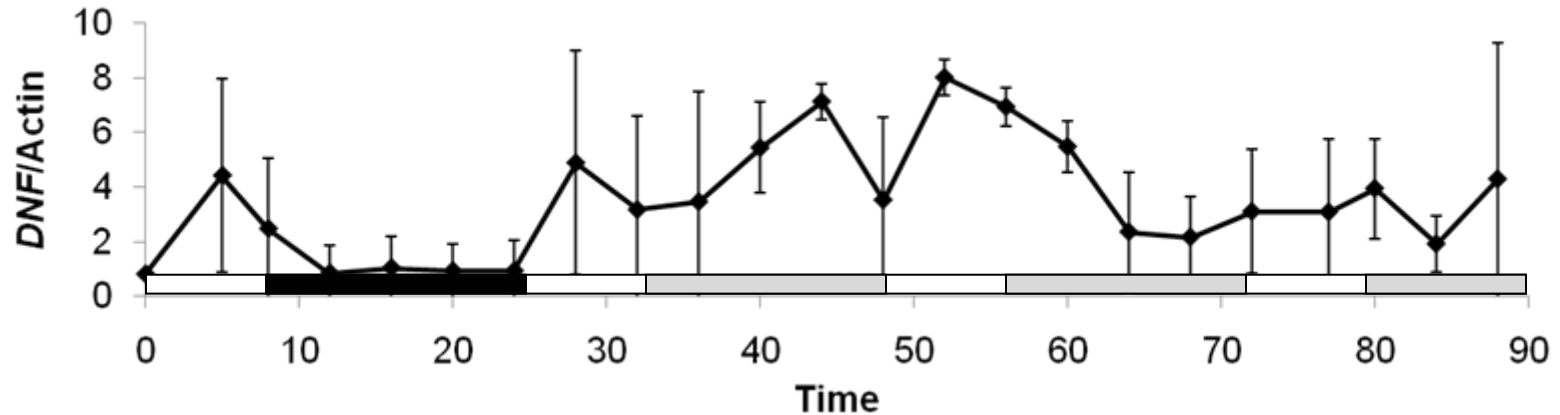
Supp. Fig.6. *DNF* expression following transfer from SD to continuous light.
Expression of *DNF* in Ws in one 8h SD and then after transfer to continuous white light.
Expression is normalised to β-*Actin*. White and black bars represent light and dark periods respectively,
shaded bars represent subjective dark periods. Data points represent an average of 2 experimental replicates
each with 3 technical replicates. Error bars represent standard deviation.

Supp. Fig.7

Supp. Fig.7. *GI* expression.

Expression of *GI* in Ws and the *dnf* mutant in SD. Expression is normalised to β-Actin. Light and shaded bars represent light and dark periods respectively. Data points represent an average of 2 experimental replicates each with 3 technical replicates. Error bars represent standard deviation.

Suppl. Table 1

Sequences of primers used

Primer name	Sequence (5' to 3')
O3p5	CGGTGATTTCGTTGGTTTGTTAT
O3p9	ATGGGCCTTATACTCAACACCTG
O3attB1	AAAAAGCAGGCTCCACCATGAACGAAGATGCTCTC
O3attB2	AGAAAGCTGGGTCCTAACCGGAATTAGGGTTTGGA
P35Sfor	CGAAGCTTGACTAGAGCCAAGCTGATCTC
P35Srev	CGGAATTCTAGATCGACTAGAATAGTAAATTGT
PDNFfor	TGAAGCTTGGTGATTTCGTTGGTTTGTTAT
PDNFrev	CGGAATTCTAGACTTAAAAACTTTTGCAATATC
DNFfor1	CGGAATTCTAGAATGAACGAAGATGCTCTCGAA
DNFrev	GGGATCCACCGGAATTAGGGTTTGGACT
EGFPfor	CGGGATCCATGGTGAGCAAGGGCGAGGAG
EGFPrev	CGGAGCTCTTACTTGTACAGCTCGTCCAT
DNFfor2	GACACATGGCTTCAGACT
DNFrev2	ACCGGAATTAGGGTTTGGAC
Actinfor	TGTCGCCATCCAAGCTGTTCTCT
Actinrev	GTGAGACACCATCACCAGAAT
FTfor	GGCCTTCTCAGGTTCAAAACA
FTrev	TCGGAGGTGAGCGTTGCTA
COfor	GAGAAATCGAAGCCCGAGGAGCA
COrev	TCAGAATGAAGGAACAATCCCATA

Suppl. Table 1 (continued)

Sequences of primers used

Primer name	Sequence (5' to 3')
GIfor	CACAGCTTGCTCTCCACAAC
GIrev	AAGTGGGTGCTCGTTATTGG
CABfor	CTGAGTTGAAGGTGAAGGAG
CABrev	ATGGTCAGCAAGGTTCTCTA
DNFF	TGAATGAAGCCATGTGTCAG
DNFR	GGATCAACCCTTCCGTTCTTT
RBR	CGAAACGCAGCACGATACG
CO-Span 2F	AGCTCCCACACCATCAAACTTCA
CO-Span 2R	CTTGGCATCCTTTATCACCTTCTT
GI-For6	TCAGAGCAATTCCCAGATGA
GI-Rev5	CACCAACGAGCCATCAATAA