

## Aberystwyth University

### *A Functional Kinase Is Necessary for Cyclin-Dependent Kinase G1 (CDKG1) to Maintain Fertility at High Ambient Temperature in Arabidopsis*

Nibau, Candida; Dadarou, Despoina; Kargios, Nestoras; Mallioura, Areti; Fernandez-Fuentes, Narcis; Cavallari, Nicola; Doonan, John H.

*Published in:*  
Frontiers in Plant Science

*DOI:*  
[10.3389/fpls.2020.586870](https://doi.org/10.3389/fpls.2020.586870)

*Publication date:*  
2020

*Citation for published version (APA):*

Nibau, C., Dadarou, D., Kargios, N., Mallioura, A., Fernandez-Fuentes, N., Cavallari, N., & Doonan, J. H. (2020). A Functional Kinase Is Necessary for Cyclin-Dependent Kinase G1 (CDKG1) to Maintain Fertility at High Ambient Temperature in Arabidopsis. *Frontiers in Plant Science*, 11, [586870].  
<https://doi.org/10.3389/fpls.2020.586870>

#### **Document License** CC BY

#### **General rights**

Copyright and moral rights for the publications made accessible in the Aberystwyth Research Portal (the Institutional Repository) are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the Aberystwyth Research Portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the Aberystwyth Research Portal

#### **Take down policy**

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

tel: +44 1970 62 2400  
email: [is@aber.ac.uk](mailto:is@aber.ac.uk)

**Supplementary Table 1:** Primers used in this study.

Primer name	Primer Sequence	Purpose
CDKG1SC attB1	GGGGACAAGTTTGTACAAAAAAGCAGGCTTGC GC TCC GAG AGG AAA ATT TAG	cloning
CDKG1 no stop attB2	GGGGACCACTTTGTACAAGAAAGCTGGGT TCCGCTTTGGAGGATATGTCG	cloning
CDKG1L attB1	GGGGACAAGTTTGTACAAAAAAGCAGGCTCGATGGCAGCAGGGGGTGTGATG	cloning
CDKG1S attB1	GGGGACAAGTTTGTACAAAAAAGCAGGCTTGTATGTCGCCAGAACCTAGTTATC	cloning
CDKG1p attB4	GGGGACAACCTTTGTATAGAAAAGTTGGTCGTATCTCTGAGAATATGG	cloning
CDKG1p attB1R	GGGGACTGCTTTTTTGTACAAACTTGTCA ATT TTG TCA AGT GGC TCT A	cloning
CDKG2 attB1	GGGGACAAGTTTGTACAAAAAAGCAGGCTTGTATGGCGCTGGGAGGAATATAAG	cloning
CDKG2 no stop attB2	GGGGACCACTTTGTACAAGAAAGCTGGGTTGCCAACAGACCGCCAGAG	cloning
CDKG2p attB4	GGGGACAACCTTTGTATAGAAAAGTTGGGTGTAAGATAAGGTCAGGC	cloning
CDKG2p attB1R	GGGACTGCTTTTTTGTACAAACTTGTACAGAACTTCGGTGAGAAAGG	cloning
CDKG1 D426N Fw	GGA TTA TCC ACA GGA ATC TGA AGC CAT CT	mutating the kinase domain
CDKG1 D426N Rv	AGA TGG CTT CAG ATT CCT GTG GAT AAT CC	mutating the kinase domain
GFP qPCR Fw	TGGTCCTGCTGGAGTTCG	qPCR
GFP qPCR Rv	CTTGTACAGCTCGTCCATGC	qPCR
PP2A qPCR Fw	TAACGTGGCCAAAATGATGC	qPCR
PP2A qPCR Rv	GTTCTCCACAACCGCTTGGT	qPCR
CalS5 exon5F	GGC CTC GCA GTC TGT TAT G	Splicing
CalS5 exon7R	TTC CCT CTG GTT TCT GAC ATT	Splicing
U2AF65A_UFT	GCACAGCAGCAAATAGCTT	Splicing
U2AF65A_E12R	GGCCTGCCACTGGCTCACCATTGG	Splicing
CDKG1_RTf	GCAGTGGACATCTCAGCGTA	detection of the endogenous <i>CDKG1</i> transcript
CDKG1_mRNA_Rv	CCAGTCGACTTCCCTGTGTA	detection of the endogenous <i>CDKG1</i> transcript