

Up-regulated cyclin-dependent kinase inhibitor gene *TaICK1* induced by chemical hybridization agent in wheat anthers acts as a potential contributor to male sterility

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Supplemental Information

Table S1. Primers for gene-specific and plasmid construction in this study

Primer	Sequence (5'-3')
Primers for gene-specific	
TaCYCD2;1-F	ATGGTTCCGTCCGGGTAC
TaCYCD2;1-R	TCATCTGCCAATTCTCCTCCT
TaCYC6;1-F	ATGGACATGCCGGGGAAGG
TaCYC6;1-R	CTACCCCCACTGGGACTGGGAAG
Primers for plant expression plasmids	
TaICK1-1301-F	CCATTTACGAACGATAGCATGAGGAAGCAGCAGCAGGCG
TaICK1-1301-R	CGAGATCTGAGTCCGGACTCACACGGTGGCCACCGGGGTC
Primers for prokaryotic expression plasmids	
TaICK1-pCold-TF-F	ACCCTCGAGGGATCCGAATTCATGAGGAAGCAGCAGCAGGCG
TaICK1-pCold-TF-R	CTATCTAGACTGCAGGTCGACTCACACGGTGGCCACCGGGGTC
TaCYCD2;1-pCold-TF-F	ACCCTCGAGGGATCCGAATTCATGGTTCCGTCCGGGTAC
TaCYCD2;1-pCold-TF-R	CTATCTAGACTGCAGGTCGACTCATCTGCCAATTCTCCTCCT
TaCYC6;1-pCold-TF-F	ACCCTCGAGGGATCCGAATTCATGGACATGCCGGGGAAGG
TaCYC6;1-pCold-TF-R	CTATCTAGACTGCAGGTCGACCTACCCCCACTGGGACTGGGAAG
Primers for subcellular localization plasmids	
TaICK1-1302EGFP-F	ACGGGGGACTCTTGACCATGGAGATGAGGAAGCAGCAGCAGGC
TaICK1-1302EGFP-R	AAGTTCTTCTCCTTTACTAGTCACGGTGGCCACCGGGGTC
TaCYCD2;1-1302EGFP-F	ATTACGAACGATAGCCATGGACATGGTTCCGTCCGGGTAC

TaCYCD2;1-1302EGFP-R	AGATCTGAGTCCGGACCATGGTCTGCCAATTCTCCTCCT
TaCYC6;1-1302EGFP-F	ATTTACGAACGATAGCCATGGACATGGACATGCCGGGGAAGG
TaCYC6;1-1302EGFP-R	AGATCTGAGTCCGGACCATGGCCCCCACTGGGACTGGGAAG
Y2H plasmids primers	
TaICK1-BD-F	CATGGAGGCCGAATTCATGAGGAAGCAGCAGCAGGCG
TaICK1-BD-R	ATGCGGCCGCTGCAGGTTCGACGCGTCTCTTTTCTCTCCC
TaCYCD2;1-AD-F	TGGAGGCCAGTGAATTCATGGTTCCGTCCGGGTAC
TaCYCD2;1-AD-R	TCGAGCTCGATGGATCCTCTGCCAATTCTCCTCCT
TaCYC6;1-AD-F	TGGAGGCCAGTGAATTCATGGACATGCCGGGGAAGG
TaCYC6;1-AD-R	TCGAGCTCGATGGATCCCCCCCCACTGGGACTGGGAAG
BiFC plasmids primers	
TaICK1-BIFC-F	CACGCTGAAATCACCAGGTGCGAAGATGAGGAAGCAGCA
TaICK1-BIFC-R	CTCGCCCTTGCTCACCATCTCTGCTCTCACGGTGGCCAC
TaCYCD2;1-BIFC-F	CACGCTGAAATCACCAGGATGGTTCCGTCCGGGTAC
TaCYCD2;1-BIFC-R	CTTCTGCTTGTCGGCCATTCTGCCAATTCTCCTCCT
TaCYC6;1-BIFC-F	CACGCTGAAATCACCAGGATGGACATGCCGGGGAAGGAC
TaCYC6;1-BIFC-R	CTTCTGCTTGTCGGCCATCCCCCACTGGGACTGGGAAG

Table S2. Primers used for quantitative real-time RT-PCR analysis

Primer	Sequence (5'-3')
TaICK1-RT-F	CGTCAGCGACTCTGAGTGCG
TaICK1-RT-R	TCCTGCGTTTGTGCTTCTGC
TaCYCD2;1-RT-F	CTCCATGCTCGCATTCTC
TaCYCD2;1-RT-R	CTTAACACTCGCTCCTTG
TaCYC6;1-RT-F	GGACGAGGAGTTCATGTTCGA
TaCYC6;1-RT-R	GAAGCACGCCGAGAGGAAGAA
OsICK1-RT-F	CTCCATCAAGCTTTCTCCCCG
OsICK1-RT-R	TTGCTGTGCTGAGGCTGTTG
OsCYCD2;1-RT-F	GAGAGGGTATTACGGTGCTATG
OsCYCD2;1-RT-R	TGGAATGGAGAAAACGGAGC
OsCYC6;1-RT-F	GGGCGAGGAGTTCATGTTCGA
OsCYC6;1-RT-R	GAAGCACGCGGAGAGAAAGAA
TaActin-F	TGTTGTTCTCAGTGGAGGTTCT
TaActin-R	CTGTATTTCTTTTTCAGGTGGTG
OsActin-F	AACTGGGATGATATGGAGAA
OsActin-R	CCTCCAATCCAGACACTGTA