

Appendix

Title: Cloning and characterization of *CaGID1s* and *CaGAI* in *Capsicum annuum* L.

Appendix A Relative expression fold change of *CaGID1s* and *CaGAI* in different tissues during fruit set and development

		<i>CaGID1b.1</i>	<i>CaGID1b.2</i>	<i>CaGID1c</i>	<i>CaGAI</i>
Pericarp	0-5	8.06	7.54	4.17	1.23
	5-10	5.66	5.50	2.59	3.08
	10-50	0.44	0.81	0.20	0.41
Placenta	0-5	3.32	10.00	1.33	4.04
	5-10	1.46	3.69	1.31	1.01
	10-50	0.17	0.09	0.50	0.74
Seed	0-5	4.99	6.46	2.46	0.94
	5-10	2.95	5.47	2.23	0.55
	10-50	0.09	0.03	0.18	0.17

Notes: 0-5, relative expression at 0 DAP/5 DAP; 5-10, relative expression at 5 DAP/10 DAP;
10-50, relative expression at 10 DAP/50 DAP.

Supplemental Figures



Appendix B Protein structure of CaGID1s. a CaGID1b.1; b CaGID1b.2; c CaGID1c; The red arrowhead indicated the loop region.

At GI D1 a	1		VAASDEVNLI	ESRTVVPLNTWVLI	SNFKVAYNI	LRRPDGTFNRHLAEFLDRKVIA
At GI D1 c	1		VAGSEEVNLI	ESKTVVPLNTWVLI	SNFKLAYNI	LRRPDGTFNRHLAEFLDRKVP A
Ca GI D1 c	1	MARNNE	ATTANESKS	ESKRVPPLNTWVLI	SNFKLSYNL	LRRPDGTFNRHLAEFLDRKVS A
At GI D1 b	1		VACGNEVNLI	NECKRI	VPLNTWVLI	SNFKLAYKVLRRPDGSFNRDLAEFLDRKVP A
Ca GI D1 b. 1	1					MLRRPDGTFNRDLAEFLDRKVPIT
Ca GI D1 b. 2	1		VAGSNEI	NASESKRVVPLNTWVLI	SNFKLAYNI	MLRRSDGTFNRDLAEFLERKVP A
↓						
At GI D1 a	56	NANPVDGVFSFDVLI	DRRI	NLLSRVYRPAYADQ	EQPPSI	LDLEKPVVDG. DI VPVI LFFHG
At GI D1 c	56	NANPVNGVFSFDVLI	DROT	NLLSRVYRPADAG.	TSPSI	TDLQNPVDG. EI VPVI VFFHG
Ca GI D1 c	61	NANPVDGVFSFDVVI	DREI	GLLSRVYRPAFED.	EASPSL	TELEKPVTA. DVVPVI IFFHG
At GI D1 b	56	NSFPLDGVFSFD.	HVDST	TNLLTRI	YQPASLL	HOTRHGTLELT KPLSTTEI VPVI I FFFHG
Ca GI D1 b. 1	24	NSIPVDGVYSFD.	VFDRVT	SLLNRI	YRSAP.	EDEI DWGKI ELEKPLSTTEI VPVI I YFFHG
Ca GI D1 b. 2	56	NSIPVDGVYSFD.	VVDRATS	LLNRVYKPA.	KHEADWGKI	ELDKPLSTTEI VPVI I FFFHG
↓						
At GI D1 a	115	GSFAHSSANS	AI YDTLCRRLVGL	CKC	VVVSVNYRR	APENPYPCAYDDGWIALNWNVNSRSW
At GI D1 c	113	GSFAHSSANS	AI YDTLCRRLVGL	CGA	VVVSVNYRR	APENRYPCAYDDGWAVLKWNSSSW
Ca GI D1 c	119	GSFAHSSANS	AI YDTLCRRLVGL	CNA	VVVSVNYRR	APENRYPCAYDDGWTALWVNSRW
At GI D1 b	115	GSFTHSSANS	AI YDTFCRRLVTL	CGV	VVVSVNYRR	SPETHRYPCAYDDGWNALNWKSRVW
Ca GI D1 b. 1	82	GSFTHSSANS	AI YDTFCRRLVKI	CKA	VVVSVNYRR	SPETHRYPCAYDDGWAALKWVKSRSW
Ca GI D1 b. 2	114	GSFTHSSANS	AI YDTFCRRLVSI	CKA	VVVSVNYRR	SPENRYPCAYDDGWAALKWVQSRW

Appendix C Alignment of GID1 amino sequences. The black arrowhead indicated the proline located in the loop region.

Appendix D The oligonucleotide primers for gene cloning and qRT-PCR analysis

Name	Oligonucleotide sequences (5' to 3')
Genes isolation	
<i>1-CaGID1b.1(F)</i>	ATGGCTGGAAGTAATGAAAT
<i>2-CaGID1b.1(R)</i>	TGAACAGTTAGAATGGATGA
<i>3-CaGID1b.2(F)</i>	ATGGCAGGCAGTAACGAGAT
<i>4-CaGID1b.2(R)</i>	TGAATGGTTAGGATGGATAAA
<i>5-CaGID1c(F)</i>	ATGGCAAGAAACAATGAAGC
<i>6-CaGID1c(R)</i>	AGAGTCAGAATTCACGAAGC
<i>7-CaGAI(F)</i>	ATGAAGAGAGACAAAACGAT
<i>8-CaGAI(R)</i>	ACAAACGGAGTTGAGTTTCC
qRT-PCR	
<i>9-CaAct(FQ)</i>	ATCCAGCCTTCACCATTC
<i>10-CaAct(RQ)</i>	GGTCATCATCTCCGGTTTGC
<i>11-CaGID1b.1(F)</i>	GTGCTTACGACGATGGATGG
<i>12-CaGID1b.1(R)</i>	TTTTCCCCACCGAACATTGG
<i>13-CaGID1b.2(F)</i>	ATGCCCTCCAGTACCAATCC
<i>14-CaGID1b.2(R)</i>	TATTGCTCACCATGTTGCGG
<i>15-CaGID1c(F)</i>	GAAGGTTTCAGACAGGGACCA
<i>16-CaGID1c(R)</i>	TTAACCTCTTGTCCGGCCTT
<i>17-CaGAI(F)</i>	GAACTCAACCCACAACACCC
<i>18-CaGAI(R)</i>	CACCTCTGTCGTACTGGGTT