

SUPPLEMENTARY DATA

TABLE S2. List of cDNAs encoding ICK/KRP proteins used in this study, and manually corrected sequences

Plant species	Name ^a	Accession number(s) for the cDNA	Sources ^b
<i>Arabidopsis thaliana</i>	<i>Arath</i> ;ICK1/KRP1	U94772, BP844999, BP849893	TAIR ¹
	<i>Arath</i> ;ICK2/KRP2	CK118878, CF773464	TAIR ²
	<i>Arath</i> ;ICK3/KRP5	AU237320, AU228360	TAIR ³
	<i>Arath</i> ;ICK4/KRP6	AU237797, AU228889	TAIR ³
	<i>Arath</i> ;ICK5/KRP7	NM_103850	TAIR ³
	<i>Arath</i> ;ICK6/KRP3	BT025290	TAIR ³
	<i>Arath</i> ;ICK7/KRP4	AU238423, BX835336	TAIR ³
<i>Aquilegia sp</i>	<i>Aqu</i> ;TC17730	TC17730, TC6497	TIGR
<i>Beta vulgaris</i>	<i>Betvu</i> ;TC444	TC444	TIGR
<i>Brachypodium distachyon</i>	<i>Bradi</i> ;ICK1	Bradi3g58107	MIPs ⁴
	<i>Bradi</i> ;ICK2	Bradi1g45985	MIPs ⁴
	<i>Bradi</i> ;ICK3	Bradi4g13680	MIPs ⁴
	<i>Bradi</i> ;ICK4	Bradi4g32265	MIPs ⁴
	<i>Bradi</i> ;ICK5	Bradi1g75877	MIPs ⁴
	<i>Bradi</i> ;ICK6	Bradi1g75887	MIPs ⁴
	<i>Bradi</i> ;ICK7	Bradi3g28507	MIPs ⁴
<i>Brassica napus</i>	<i>Brana</i> ;TC4200	TC4200	TIGR
<i>Agrostis capillaris</i>	<i>Agrca</i>;DV852835	DV852835	PGDB
<i>Chenopodium rubrum</i>	<i>Cheru</i> ;CDK11	O48597	NCBI
<i>Citrus sinensis</i>	<i>Citsi</i> ;DN134829	DN134829	PGDB
	<i>Citsi</i> ;CX674730	CX674730	PGDB
<i>Euphorbia esula</i>	<i>Eupes</i> ;KRP4	AY823269, AY823269	TAIR
	<i>Eupes</i> ;DV137303	DV137303	PGDB
<i>Fragaria vesca</i>	<i>Frave</i> ;CX661375	CX661375	PGDB
<i>Glycine max</i>	<i>Glyma</i> ;CKI1;1	Q6T2Z3, TC207407, TC29328, TC32747	NCBI
	<i>Glyma</i> ;CKI1;2	Q6T2Z2, TC207408	NCBI
	<i>Glyma</i> ;CKI2;1	Q6T2Z1, TC207864, TC103910, TC138816, TC166272, TC181833, TC77458, TC84008	NCBI
	<i>Glyma</i> ;CKI2;2	Q6T2Z0, TC207863, TC166273, TC181834	NCBI
	<i>Glyma</i> ;TC209994	TC209994, TC115851, TC127935, TC169616, TC199486, TC48622, TC65488, TC84624	TIGR
	<i>Glyma</i> ;TC231727	TC231727, TC141624, TC171132, TC200015	TIGR
<i>Gossypium arboreum</i>	<i>Gosar</i> ;TC39505	TC39505	TIGR
	<i>Gosar</i>;TC36522	TC36522	TIGR
	<i>Gosar</i> ;TC30716	TC30716, TC12939, TC1525, TC19237, TC22889, TC4674	TIGR
<i>Gossypium hirsutum</i>	<i>Goshi</i> ;DT571795	DT571795	PGDB
<i>Ipomoea nil</i>	<i>Iponi</i> ;CJ753702	CJ753702	PGDB
<i>Lactuca perennis</i>	<i>Lacpe</i> ;DW085493	DW085493	PGDB
	<i>Lacpe</i> ;DW087080	DW087080	PGDB
	<i>Lacpe</i> ;DW085482	DW085482	PGDB
<i>Lactuca saligna</i>	<i>Lacsa</i> ;DW054560	DW054560	PGDB
<i>Solanum lycopersicum</i>	<i>Solly</i> ;KRP1	Q8GT29	NCBI ⁵
	<i>Solly</i> ;KRP2	Q8GT28, TC157790, TC110809, TC139690, TC71277, TC75899, TC89097	NCBI ⁵
<i>Malus x domestica</i>	<i>Maldo</i> ;CN912198	CN912198	PGDB
<i>Medicago truncatula</i>	<i>Medtr</i> ;TC102985	TC102985	TIGR
	<i>Medtr</i>;CB894939	CB894939	TIGR
	<i>Medtr</i> ;KRPMT	DQ093069	NCBI ⁶
<i>Nicotiana glauca</i>	<i>Nicsy</i> ;KIS1	CAC82732, NSY297905, AJ297905	NCBI ⁷
<i>Nicotiana tabacum</i>	<i>Nicta</i> ;DW003665	DW003665	PGDB
	<i>Nicta</i> ;DV161051	DV161051	PGDB

	<i>Nicta</i> ;KIS2	NP916714, AJ517189, CAD56868	NCBI ⁷
<i>Nicotiana tomentosiformis</i>	<i>Nictr</i> ;KIS1a	CAC82731, AJ297904, CAC82733, AJ297906	NCBI ⁸
<i>Oryza sativa</i> (subsp. <i>indica</i>)	<i>Orysa</i> ;ICK1	IBCD008058	BGI
	<i>Orysa</i> ;ICK2	IBCD019818	BGI
	<i>Orysa</i> ;ICK3	IBCD008789	BGI
	<i>Orysa</i> ;ICK4	IBCD028812	BGI
	<i>Orysa</i> ;ICK5	IBCD008803	BGI
	<i>Orysa</i> ;ICK6	IBCD030935	BGI
<i>Oryza sativa</i> (subsp. <i>japonica</i>)	<i>Orysa</i> ;KRP1	DQ229362, AK103084	NCBI ⁹
	<i>Orysa</i> ;KRP2	DQ229363	NCBI ⁹
	<i>Orysa</i> ;KRP3	DQ229364	NCBI ⁹
	<i>Orysa</i> ;KRP4	AAG16867	NCBI ⁹
	<i>Orysa</i> ;KRP5	DQ229366, AK064723	NCBI ⁹
	<i>Orysa</i> ;KRP6	AK063208, BI306406	PGDB
<i>Petunia hybrida</i>	<i>Pethy</i> ;EST884434	CV296057, EST884434	TIGR
<i>Phaseolus vulgaris</i>	<i>Phavu</i> ;BQ481784	BQ481784	TIGR
<i>Pisum sativum</i>	<i>Pissa</i> ;CKI	Q9FS28	TAIR
<i>Picea glabra</i>	<i>Picgl</i> ;TC9046	TC9046	TIGR
<i>Pinus taeda</i>	<i>Pinta</i> ;TC61074	TC61074	TIGR
<i>Poncirus trifoliata</i>	<i>Pontr</i> ;CD574460	CD574460	PGDB
<i>Populus sp</i>	<i>Pop</i> ;TC37787	TC37787, TC8233	TIGR
	<i>Pop</i> ;TC23987	TC23987, TC10401	TIGR
<i>Populus deltoides</i>	<i>Popde</i> ;TC22599	TC22599	TIGR
<i>Populus petioles</i>	Popou ;TC43100	TC43100, CA823704	TIGR
<i>Populus tremula</i>	Poptr ;TC41878	TC41878, TC11798	TIGR
<i>Populus trichocarpa</i>	<i>Poptr</i> ;ICK1	DT473677, CV227354	PGR
	Poptr ;ICK2	CV256047	PGR
	<i>Poptr</i> ;ICK3	CK106261	PGR
	<i>Poptr</i> ;ICK4	DN496580	PGR
	<i>Poptr</i> ;ICK5	TC413221, DT481699	PGR
	<i>Poptr</i> ;ICK6	CV229566	PGR
	Poptr ;ICK7	CV240489	PGR
<i>Saccharum officinarum</i>	<i>Sacof</i> ;CA111761	CA111761	PGDB
	<i>Sacof</i> ;CA113287	CA113287	PGDB
<i>Solanum tuberosum</i>	<i>Soltu</i> ;TC129555	TC129555, TC110095, TC48670, TC72539, TC90224	TIGR
	<i>Soltu</i> ;TC126156	TC126156, TC102513, TC53536, TC57940, TC83785	TIGR
	Soltu ;TC114843	TC114843	TIGR
	<i>Soltu</i> ;CV492391	CV492391	TIGR
<i>Sorghum bicolor</i>	<i>Sorbi</i> ;TC105178	TC105178, TC62225, TC63254, TC88077, TC90296	TIGR
	<i>Sorbi</i> ;TC106554	TC106554	TIGR
	<i>Sorbi</i> ;BG240420	BG240420	TIGR
<i>Taraxacum kok-saghyz</i>	<i>Tarko</i> ;DR402922	DR402922	PGDB
<i>Triticum aestivum</i>	<i>Triae</i> ;TC255455	TC255455, TC111262, TC176677, TC211160, TC37210, TC54255, TC72546, TC9630	TIGR
	<i>Triae</i> ;TC257918	FGAS025551, CK213642	TIGR
<i>Viti vitifera</i>	<i>Vitvi</i> ;TC39855	TC39855, TC10752, TC14919, TC1742, TC26537	TIGR
<i>Vitis riparia</i>	<i>Vitri</i> ;CO408372	CO408372	PGDB
<i>Zea mays</i>	<i>Zeama</i> ;KRP1	AY986792, TC288918, TC288919	NCBI ¹⁰
	<i>Zeama</i> ;KRP2	AY986793, TC297785, TC292375	NCBI ¹⁰
	<i>Zeama</i> ;TC306014	TC306014, TC215773, TC229055, TC276934	TIGR
	<i>Zeama</i> ;KRP3	TC306015, TC175313	TIGR
	<i>Zeama</i> ;TC292391	TC292391, TC109503, TC122803, TC143223, TC163784, TC185468, TC197994, TC225705, TC263080, TC63242, TC87895	TIGR
	<i>Zeama</i> ;CF636654	CF636654, TC295510	TIGR
	<i>Zeama</i> ;KRP4	TC301833	TIGR

^a Sequences in bold font were manually corrected (see sequences listed below). The original sequences all had a frame shift error.

^b **TAIR** - The Arabidopsis Information Resource (<http://www.arabidopsis.org/wublast/index2.jsp>), **TIGR** - The Institute for Genomic Research (<http://tigrblast.tigr.org/tgi/>), **PGDB** - Plant Genome DataBase (<http://www.plantgdb.org/PlantGDB-cgi/blast/index.cgi>), **NCBI** - National Center for Biotechnology Information (<http://www.ncbi.nlm.nih.gov/entrez/>), and **PGR** - Populus genome release 1.1 (http://genome.jgi-psf.org/Poptr1_1/Poptr1_1.home.html). **References:** ¹ Wang *et al.* (1997); ² Lui *et al.* (2000); ³ De Veylder *et al.* (2001); ⁴ Brachypodium distachyon project (<http://mips.helmholtz-muenchen.de/plant/brachypodium/>); ⁵ Bisbis *et al.* (2006); ⁶ Pettko-Szandtner *et al.* (2006); ⁷ Jasinski *et al.* (2002b); ⁸ Jasinski *et al.* (2002a); ⁹ Barroco *et al.* (2006); and ¹⁰ Coelho *et al.* (2005).

Notes on variation in some ICK/KRP data from Arabidopsis, rice and poplar

The rice accessions Os06g11050 and BAD35196 are related to the accession DQ229363 of *Oryza;KRP2* reported by Barroso *et al.* (2006), but they encode longer polypeptides (extended beyond the C-terminus of the DQ229363 by 410 and 468 amino acids respectively). For BAD35196, the extra sequence following the C-terminus of *Oryza;KRP2* is similar, oddly, to a cellulose synthase-like domain unrelated to the cell cycle. *Oryza;KRP4* has a related accession (AAG16867) which encodes for a polypeptide of 242 amino acids (the corresponding cDNA sequence information was not available). *Arabidopsis;KRP4* has two accessions (At2g32710.1 and At2g32710.2) supported by cDNAs. Further examination of the annotation information indicated that the mRNA of At2g32710.1 comes from Ws/Ler ecotype and thus this sequence is a polymorphic variant of the At2g32710.2 from the 'Columbia' ecotype. Finally Poptr:ICK2 and Poptr:ICK5 (Accessions GRAIL3.0019007301 and eugene3.00012276, respectively) are sequences obtained from the JGI genome assembly v1.1 and were manually corrected based on EST sequence information (data not shown).

Sequences manually corrected

>Medtr;CB894939

MGKYMKKLKSSESPSPNSTPITNSPPTPITITNSPPATTPNSSDGVITR
ARTLAFENSNNQNLVSVSSDYLQLRNRRLKRPLLRQHSKRNRKGNDS
PKSPIGNSTAEKTVQKSPENAEFGVNAEDAERSARETTPVHLIMRSD
VLRPPRSITKRTFSTEANPRTEQPTIPIISPEFEEYFAKHEAEQQREFMEK
YNFDPVTEQPLPGRFEWEKVP*

>Gosar;TC36522

MKSKITGDVAVMEVSHRSTMSRTRAAKTLALQRLSKTTQVTQVVGSNQD
VSSLSYLQLRNRRLKELASPVSSKTKHTQEEKESGFREEEGKNGGKKNK
GCFGNREIVLEVGICCGTEQAMDFELRDRSTPCSLTKDLKTIPSPGLVND
VLQSVSPSTQEMEEFFVYAEQQQHRRFIEKYNFDIVNDLPLQGRYDVKIIP*

>Soltu;TC114843

MGKYIRKARKTEDVSPGLVTRAKALALNGGDGGSYLELRSRRLVKPFAV
LEGRRQKNGVPKNPVNPVNPQIPNVCVNSEEGKGVKEMENQKEKEKSC
LGPEDSFGEKLLFEFGRKRTTRESTPCSLIRSDNIQTPGSSTRRTNANE
ANGRVVNSIQPNIPDLEIDEFFTRAEKEQQRKFKIEKYNFDPVNDKPLPG
RYEWLKVYSL*

>Poptr;TC41878

MGKYMRKSKITSDVVAVMEVTSGVRTRAKTHALQLLQSPVSSNLDAPPPV
TSSXGAAALKNQRHSSMLKPKGTTKEKDTFSCKGASRLRVNSSTTGDCD
EKGTGKLGFKCETEDSGSLKEASSGDNCFDFERCTRESTPCSLIRSDENH
SKTRVQPQDRESSNCGQPETLEHAEKYPDNMEMDEFFAGVEQQQQLFIE
KYNFDIVNDLPLSGRYEWRVIP*

>Popeu;TC43100

MVKAQVGVKTRTRATRKRSRHIKISIKVRSNVTSSRQERVIIIRS
DNSVSYPLDVSSGQRMVTEERCSSPSLDDDFDDNHSLSMSSTSCFSSNGSC
DEIIKFTDLEERVEVETSMYSSRREREKTPSSALREESMSENMDST
ATPAPLKKPNSHRRSTAAVIRITDEEVEKFFCEIEKTVPQRFKDKYNFD
FDKDEALEGRYEWVRLNP*

>Agrca;DV852835

MAATAAAATAAVKAVSSSCSKRESNIAVAADLPKKAKKGRAPPPEEVEAF
FAAAESGVARRFAAKYNYDVVEDAPMDGRYEWVVRP*

>Poptr;ICK2

MVKAPPPPPAAQVGKTRTRATKKRSRHIKISIKVRSNVTSSRQERVII
RSDNSASYPLDVNSGHRMVTTEERCSSPSLDDDFEDNHSLSSTSCCSSNG
SCDEIIKFTDLEEEERVEVETSMTYSSSREREKTPTSNALREESTSENMD
STATPAPLKKPNSHRRSTAAAVIRITDEEVEKFFCEIEKTVPQRFKDKYN
FDFDKDEALEGRYEWVRLNP*

>Poptr;ICK5

MGKYMRKAKTTSDVAVMDLTHGVRTRARTLALKKQGVKASPPSSPAGYL
QLRSRLEKKPPPIPSLHHDSRRQHHRQGGQNSKLGQQQQEVEEIPS
PNLKSSSGSQEKERGESKVDREVEENNSNSKDLGSFGDNVLDIEGRD
RSTRESTPCNLTRGTEDARTPGSTTKPANPTESSRRLHNSTRRHIPTAHE
MDEFFGPAEEEEQLRQFTEKYNFDPVSDKPLHGRYEWKLDLDR*