Table 1 Identification, classification and physicochemical properties of *CiWRKY* genes

Gene name	Gene ID	Group	Number of amino acid	Molecular weight	Theoretical pI	Instability index	Aliphatic index	Grand average of hydropathicity	Subcellular localization
CiWRKY1	CiPaw.01G014300	IId	340	37190.96	9.50	57.00	64.56	-0.628	nucleus
CiWRKY2	CiPaw.01G066400	IIe	335	36720.32	5.27	57.21	50.72	-0.787	nucleus
CiWRKY3	CiPaw.01G067800	IIc	205	23309.64	9.30	49.00	67.51	-0.679	nucleus
CiWRKY4	CiPaw.01G073900	III	352	39323.53	5.15	53.91	60.65	-0.691	nucleus
CiWRKY5	CiPaw.01G127700	IIb	405	44206.63	7.70	57.79	65.41	-0.551	chloroplast
CiWRKY6	CiPaw.01G136600	IIc	334	37583.59	5.88	66.90	46.44	-0.987	nucleus
CiWRKY7	CiPaw.01G254500	IIa	312	34585.67	7.61	47.08	63.75	-0.758	nucleus
CiWRKY8	CiPaw.01G306900	III	379	42069.11	5.97	61.05	69.21	-0.634	nucleus
CiWRKY9	CiPaw.01G307000	III	321	36128.22	5.40	60.87	65.36	-0.735	nucleus
CiWRKY10	CiPaw.02G007000	IId	334	36957.96	9.38	42.40	66.26	-0.590	nucleus
CiWRKY11	CiPaw.02G034700	IIe	329	35772.31	5.05	62.39	54.59	-0.719	nucleus
CiWRKY12	CiPaw.02G035600	IIc	213	24307.73	9.23	49.56	64.04	-0.700	peroxisome
CiWRKY13	CiPaw.02G073500	IIc	326	36519.61	7.66	64.56	49.94	-0.918	nucleus
CiWRKY14	CiPaw.02G162100	IIa	316	35093.18	8.81	44.35	59.59	-0.870	nucleus
CiWRKY15	CiPaw.02G199000	III	363	40112.92	6.33	59.67	58.07	-0.701	nucleus
CiWRKY16	CiPaw.03G021200	I	517	56487.63	6.96	59.56	56.83	-0.771	nucleus
CiWRKY17	CiPaw.03G057700	IIc	186	21592.31	9.55	40.21	51.29	-0.965	nucleus
CiWRKY18	CiPaw.03G132400	IIc	210	23726.84	9.15	41.99	67.33	-0.605	nucleus
CiWRKY19	CiPaw.03G133500	IIc	190	21170.42	5.72	39.39	57.47	-0.750	nucleus
CiWRKY20	CiPaw.03G158300	IIb	632	68461.67	5.79	43.21	59.83	-0.703	nucleus
CiWRKY21	CiPaw.03G191000	IIc	305	34106.80	6.01	57.33	57.87	-0.836	nucleus
CiWRKY22	CiPaw.03G258800	IId	345	38228.54	9.49	55.15	71.77	-0.631	nucleus
CiWRKY23	CiPaw.04G014200	I	411	45185.20	8.17	59.63	57.69	-0.905	nucleus
CiWRKY24	CiPaw.04G019000	IIb	584	64364.93	7.57	49.74	60.67	-0.682	nucleus
CiWRKY25	CiPaw.04G039100	IIc	192	21792.63	9.42	45.92	54.79	-0.808	nucleus
CiWRKY26	CiPaw.04G089600	IIc	240	27202.55	9.22	52.87	55.62	-0.814	nucleus
CiWRKY27	CiPaw.04G090900	IIc	168	18918.78	7.12	59.53	49.29	-1.023	nucleus
CiWRKY28	CiPaw.04G114200	IIb	628	68098.75	6.48	47.06	60.67	-0.661	nucleus
CiWRKY29	CiPaw.04G182800	IId	344	38678.81	9.52	53.54	63.49	-0.801	nucleus
CiWRKY30	CiPaw.04G195800	I	464	51206.31	5.87	50.55	56.85	-0.924	nucleus
CiWRKY31	CiPaw.05G042300	IIb	528	58129.76	6.06	42.26	69.47	-0.688	nucleus
CiWRKY32	CiPaw.05G107300	IIc	181	20599.07	9.47	44.70	53.31	-0.839	nucleus
CiWRKY33	CiPaw.05G126900	IIc	230	25523.74	6.18	57.82	40.22	-1.108	nucleus
CiWRKY34	CiPaw.05G129000	I	539	58344.52	8.36	54.85	55.77	-0.829	nucleus

Continued Table 1

Gene name	Gene ID	Group	Number of amino acid	Molecular weight	Theoretical pI	Instability index	Aliphatic index	Grand average of hydropathicity	Subcellular localization
CiWRKY36	CiPaw.05G257700	III	376	42114.93	6.6	65.43	59.44	-0.697	nucleus
CiWRKY37	CiPaw.05G261200	IIe	407	44301.32	5.57	63.24	51.38	-0.876	nucleus
CiWRKY38	CiPaw.06G007700	III	380	42296.65	5.65	59.07	57.76	-0.710	nucleus
CiWRKY39	CiPaw.06G081500	IIb	337	37105.99	8.96	54.34	57.89	-0.718	nucleus
CiWRKY40	CiPaw.06G089200	I	527	57123.12	6.58	55.53	58.69	-0.739	nucleus
CiWRKY41	CiPaw.06G091000	IIc	331	36543.33	6.45	57.17	58.28	-0.751	nucleus
CiWRKY42	CiPaw.06G104900	IIc	180	20383.81	9.30	47.26	50.89	-0.869	nucleus
CiWRKY43	CiPaw.06G149300	IIb	530	58783.37	5.53	43.87	69.75	-0.721	nucleus
CiWRKY44	CiPaw.07G118300	IIe	265	30046.68	5.40	49.74	62.19	-0.869	nucleus
CiWRKY45	CiPaw.07G119500	IIc	308	34065.14	6.72	66.56	61.46	-0.639	nucleus
CiWRKY46	CiPaw.07G125900	IIb	544	59762.15	8.13	50.69	64.60	-0.619	nucleus
CiWRKY47	CiPaw.07G199600	IId	315	34426.04	9.94	52.59	63.78	-0.625	nucleus
CiWRKY48	CiPaw.07G211500	IId	344	36959.98	9.67	45.42	65.78	-0.480	nucleus
CiWRKY49	CiPaw.07G229500	IIa	306	34486.7	7.65	49.13	65.69	-0.751	nucleus
CiWRKY50	CiPaw.07G229600	IIa	264	29905.44	8.51	59.45	69.13	-0.755	nucleus
CiWRKY51	CiPaw.08G006400	IIa	273	30585.53	8.86	59.86	73.22	-0.696	peroeus
CiWRKY52	CiPaw.08G006500	IIa	310	34718.92	8.38	49.39	62.68	-0.709	nucleus
CiWRKY53	CiPaw.08G031100	IId	316	34698.34	9.82	45.88	65.44	-0.574	nucleus
CiWRKY54	CiPaw.08G087600	IIc	218	24291.21	9.40	63.60	54.54	-0.877	nucleus
CiWRKY55	CiPaw.08G089100	IIe	256	29242.87	5.81	52.42	68.52	-0.915	nucleus
CiWRKY56	CiPaw.08G115100	I	720	78097.63	5.22	44.76	68.68	-0.540	nucleus
CiWRKY57	CiPaw.09G072600	IIe	248	27480.58	5.19	57.71	54.23	-0.706	nucleus
CiWRKY58	CiPaw.09G095400	IIb	588	63732.02	6.18	46.86	65.77	-0.604	nucleus
CiWRKY59	CiPaw.09G128600	IIc	332	36331.24	6.66	63.55	44.70	-0.790	nucleus
CiWRKY60	CiPaw.09G147900	IIe	459	48923.19	5.22	47.96	52.96	-0.583	nucleus
CiWRKY61	CiPaw.09G184100	I	475	51568.10	8.85	51.39	57.85	-0.826	nucleus
CiWRKY62	CiPaw.09G194700	None	338	38197.16	5.57	58.02	61.21	-0.856	nucleus
CiWRKY63	CiPaw.09G216000	I	542	60274.04	6.30	59.25	46.24	-0.908	nucleus
CiWRKY64	CiPaw.09G222100	III	309	34750.04	6.55	63.03	71.97	-0.657	nucleus
CiWRKY65	CiPaw.10G061400	IIe	251	27895.11	5.04	51.26	54.78	-0.710	nucleus
CiWRKY66	CiPaw.10G073300	IIb	588	63290.08	5.95	45.67	65.27	-0.615	nucleus
CiWRKY67	CiPaw.10G094700	IIc	317	35918.59	6.92	62.88	45.58	-1.018	nucleus
CiWRKY68	CiPaw.10G138200	I	474	51575.63	9.43	43.46	54.63	-0.887	nucleus
CiWRKY69	CiPaw.10G146700	None	297	33436.37	4.89	60.67	66.7	-0.677	nucleus

Continued Table 1

Gene name	Gene ID	Group	Number of amino acid	Molecular weight	Theoretical pI	Instability index	Aliphatic index	Grand average of hydropathicity	Subcellular localization
CiWRKY73	CiPaw.11G039600	IIb	610	66385.11	6.31	53.89	51.28	-0.854	nucleus
CiWRKY74	CiPaw.11G123000	III	358	40233.73	5.43	66.44	66.45	-0.680	nucleus
CiWRKY75	CiPaw.11G129700	IIe	307	34391.91	5.84	61.27	65.41	-0.593	nucleus
CiWRKY76	CiPaw.11G200800	I	498	54779.69	6.58	39.83	62.79	-0.729	nucleus
CiWRKY77	CiPaw.11G211300	I	745	80032.94	5.70	58.71	59.17	-0.679	nucleus
CiWRKY78	CiPaw.12G015800	IIb	427	47970.75	8.62	44.68	63.28	-0.734	nucleus
CiWRKY79	CiPaw.12G084300	III	357	39654.96	5.89	51.31	60.36	-0.614	nucleus
CiWRKY80	CiPaw.12G089100	IIc	180	20585.3	9.64	39.56	66.61	-0.803	nucleus
CiWRKY81	CiPaw.12G089200	IIe	311	34879.22	6.12	64.62	66.14	-0.625	nucleus
CiWRKY82	CiPaw.12G135700	I	584	63140.97	6.93	46.70	60.60	-0.689	nucleus
CiWRKY83	CiPaw.13G025100	IIc	227	25660.05	6.99	43.81	43.70	-0.993	nucleus
CiWRKY84	CiPaw.13G068200	I	592	64845.83	7.33	58.02	48.63	-0.912	nucleus
CiWRKY85	CiPaw.13G178200	None	162	18571.91	8.89	39.63	69.14	-0.690	chloroplast
CiWRKY86	CiPaw.14G053400	I	586	64529.93	6.45	57.66	43.99	-1.017	nucleus
CiWRKY87	CiPaw.15G052500	IId	320	34681.44	9.48	55.60	71.03	-0.503	nucleus
CiWRKY88	CiPaw.15G087700	IIc	163	18755.44	4.92	50.06	47.12	-1.133	nucleus
CiWRKY89	CiPaw.16G111300	I	517	56828.83	5.52	68.46	57.93	-0.969	nucleus