

附表 1 甘蓝型油菜 RVE 家族基因分子特征与理化性质

S1 Molecular characterization and physicochemical property of RVE members in Brassica napus

基因 Gene	编号 Code	CDS /bp	编码 蛋白 Protein length /aa	蛋白分子 量 MW/kDa	蛋白 等电 点 pI	不稳 定 指数 II	Aliphatic Index	平均亲 水 系数 GRAVY	亚细胞 定位 Subcellular localization	异义突 变 Ka	同义突 变 Ks	Ka/Ks
<i>BnaRVE8c</i>	BnaA01G0382700ZS	855	284	31623.69	8.82	40.23	73.45	-0.543	细胞核	0.094	0.465	0.202
<i>BnaRVE1a</i>	BnaA02G0069100ZS	1122	373	41868.57	6.75	77.33	58.02	-0.91	细胞核	0.104	0.277	0.375
<i>BnaRVE4c</i>	BnaA03G0008200ZS	1341	446	48711.83	6.43	56.99	78.16	-0.442	细胞核	0.754	1.761	0.428
<i>BnaRVE1d</i>	BnaA03G0073500ZS	1098	365	40580.55	8.67	62.01	64.38	-0.78	细胞核	0.104	0.277	0.375
<i>BnaRVE6a</i>	BnaA03G0134200ZS	1050	349	38269.3	8.91	45.47	71.06	-0.47	细胞核			
<i>BnaCCA1a</i>	BnaA05G0011000ZS	1635	544	59500.48	6.09	46.56	58.92	-0.848	细胞核	0.484	0.837	0.577
<i>BnaRVE2a</i>	BnaA05G0142800ZS	966	321	35969.43	8.15	52.64	62.83	-0.693	细胞核			
<i>BnaRVE8b</i>	BnaA05G0440700ZS	930	309	33778.83	6.39	45.28	66.21	-0.524	细胞核	0.094	0.465	0.202
<i>BnaRVE7a</i>	BnaA06G0125600ZS	1005	334	36889.74	8.9	56.63	52.28	-0.921	细胞核			
<i>BnaLHYd</i>	BnaA07G0053300ZS	1746	581	63722.23	5.95	51.49	56.02	-0.914	细胞核			
<i>BnaRVE5b</i>	BnaA09G0007700ZS	921	306	34234.8	9.58	53.27	69.8	-0.644	细胞核	0.027	0.109	0.246
<i>BnaRVE5a</i>	BnaA09G0014800ZS	933	310	34604.24	9.55	54.23	70.77	-0.622	细胞核	0.378	0.709	0.533
<i>BnaRVE3b</i>	BnaA10G0004600ZS	759	252	29157.4	9.63	48.56	67.62	-0.658	细胞核	0.293	1.685	0.174
<i>BnaRVE3c</i>	BnaA10G0004700ZS	891	296	33997.04	9.44	43.96	74.02	-0.544	细胞核	0.351	1.828	0.192
<i>BnaLHYa</i>	BnaA10G0008600ZS	1827	608	65613.73	6.14	49.66	58.32	-0.773	细胞核			
<i>BnaRVE6d</i>	BnaA10G0092700ZS	921	306	33794.13	8.96	45.89	66.67	-0.661	细胞核	0.059	0.408	0.145
<i>BnaRVE4b</i>	BnaA10G0294200ZS	873	290	31803.59	5.27	43.34	67.28	-0.584	细胞核			
<i>BnaRVE8d</i>	BnaC01G0480600ZS	846	281	31261.63	8.55	39.45	80.46	-0.341	细胞核	0.055	0.197	0.282
<i>BnaRVE1b</i>	BnaC02G0079400ZS	1110	369	41334.19	6.65	74.02	63.12	-0.865	细胞核	0.074	0.216	0.343
<i>BnaLHYc</i>	BnaC03G0001300ZS	1710	566	62185.94	5.85	52.65	59.05	-0.833	细胞核	0.034	0.118	0.291
<i>BnaRVE4a</i>	BnaC03G0011800ZS	813	270	29612.04	5.37	40.86	71.52	-0.561	细胞核			

<i>BnaRVE1e</i>	BnaC03G0083700ZS	1482	493	54878.84	8.1	54.11	71.99	-0.671	细胞核	0.021	0.011	1.953
<i>BnaRVE6b</i>	BnaC03G0156000ZS	810	269	29776.76	9.52	46.28	55.95	-0.687	细胞核	0.1	0.292	0.343
<i>BnaCCA1b</i>	BnaC04G0011300ZS	1608	535	58558.4	5.64	50.41	58.65	-0.843	细胞核	0.038	0.148	0.255
<i>BnaRVE3a</i>	BnaC05G0006800ZS	831	276	31510.09	9.3	37.25	70.94	-0.557	细胞核			
<i>BnaLHYb</i>	BnaC05G0010100ZS	1875	624	67148.48	6.45	51.85	57.63	-0.747	细胞核	0.0108	0.022	0.496
<i>BnaRVE7b</i>	BnaC05G0153600ZS	1326	441	48753.39	9.45	44.07	54.58	-0.942	细胞核			
<i>BnaRVE8a</i>	BnaC05G0502600ZS	906	301	33280.45	6.99	44.74	69.87	-0.561	细胞核	0.105	0.428	0.244
<i>BnaRVE2b</i>	BnaC06G0154100ZS	966	321	36056.61	7.09	54.33	64.36	-0.647	细胞核			
<i>BnaRVE6c</i>	BnaC09G0346500ZS	861	286	31664.93	9.16	46.23	65.14	-0.567	细胞核	0.077	0.414	0.186
<i>BnaRVE1c</i>	BnaC09G0491800ZS	1068	355	39078.86	9.18	62.58	66.17	-0.769	细胞核	0.081	0.321	0.254
<i>BnaRVE4d</i>	BnaC09G0614500ZS	2355	784	86099.56	5.62	61.07	82.86	-0.424	细胞核			
<i>BnaLHYe</i>	Bnascaffold0415G00 00300ZS	1746	581	63722.23	5.95	51.49	56.02	-0.914	细胞核			
