

附表 1 牡丹 AP2/ERF 基因家族成员鉴定结果及信息

Supplementary table 1 Results and information on the identification of members of the AP2/ERF gene family in peony

基因名称 Gene name	氨基酸数 Number of amino acids	蛋白质分子量 Molecular weight(kDa)	等电点 <i>pI</i>	亲水性 GRAVY	不稳定系数 Instability index	脂溶性系数 Aliphatic index	亚细胞定位 Subcellular localization
<i>PoAP2-1</i>	708	77553.45	5.9	48.18	49.39	-0.807	细胞核 Nucleus
<i>PoAP2-10</i>	207	23453.58	10.06	46.32	58.94	-0.792	叶绿体 Chloroplast
<i>PoAP2-11</i>	338	36433.8	8.86	45.72	62.66	-0.39	细胞核 Nucleus
<i>PoAP2-12</i>	504	55535.18	5.85	46.41	61.23	-0.572	细胞核 Nucleus
<i>PoAP2-13</i>	297	33603.89	9.87	67.33	63.74	-0.77	细胞核 Nucleus
<i>PoAP2-14</i>	314	35488.02	10.05	67.35	61.82	-0.791	细胞核 Nucleus
<i>PoAP2-15</i>	386	43834.07	8.54	56.03	63.96	-0.763	细胞核 Nucleus
<i>PoAP2-16</i>	658	72790.6	6.36	49.02	58.77	-0.708	细胞核 Nucleus
<i>PoAP2-17</i>	377	42729.94	8.85	51.01	67.03	-0.751	细胞核 Nucleus
<i>PoAP2-2</i>	555	61268.3	5.99	47.04	57.68	-0.712	细胞核 Nucleus
<i>PoAP2-3</i>	510	57012.76	6.66	51.93	52	-0.911	细胞核 Nucleus
<i>PoAP2-4</i>	385	43889.41	8.84	63.21	69.97	-0.701	细胞核 Nucleus
<i>PoAP2-5</i>	621	69409.03	6.19	49.89	55.36	-0.721	细胞核 Nucleus
<i>PoAP2-6</i>	377	42294.76	8.22	59.01	61.62	-0.816	叶绿体 Chloroplast
<i>PoAP2-7</i>	225	25067.7	8.94	34.91	55.96	-0.634	叶绿体 Chloroplast
<i>PoAP2-8</i>	474	51918.73	6.64	45.69	55	-0.617	细胞核 Nucleus
<i>PoAP2-9</i>	500	54709.62	6.8	44.56	59.14	-0.53	细胞核 Nucleus
<i>PoDREB1</i>	384	42941.43	6.5	66.37	67.29	-0.515	叶绿体 Chloroplast
<i>PoDREB10</i>	186	20796.51	8.41	54.23	63.01	-0.75	细胞核 Nucleus
<i>PoDREB11</i>	252	27411.7	6.63	38.1	65.48	-0.544	叶绿体

							Chloroplast
<i>PoDREB12</i>	223	24565.44	5.62	58.08	60.49	-0.613	细胞核
							Nucleus
<i>PoDREB13</i>	464	52105.02	6.94	63.58	73	-0.414	内质网
							Endoplasmic
							Reticulum
<i>PoDREB14</i>	226	24868.71	5.97	43.49	61.9	-0.635	细胞核
							Nucleus
<i>PoDREB15</i>	768	88236.53	5.26	60.62	73.59	-0.66	细胞核
							Nucleus
<i>PoDREB16</i>	431	48486.81	6.15	70.03	57.52	-0.836	细胞核
							Nucleus
<i>PoDREB17</i>	193	21392	5.95	44.33	77.36	-0.374	细胞核
							Nucleus
<i>PoDREB18</i>	158	17532.42	5.21	52.87	64.94	-0.542	线粒体
							Mitochondrion
<i>PoDREB19</i>	434	47949.86	4.81	42.4	73.09	-0.452	细胞核
							Nucleus
<i>PoDREB2</i>	235	25712.69	5.63	70.5	58.64	-0.662	细胞核
							Nucleus
<i>PoDREB20</i>	421	46956.74	4.55	43.2	80.88	-0.343	内质网
							Endoplasmic
							Reticulum
<i>PoDREB21</i>	276	29909.29	5.66	43.25	52.07	-0.564	细胞核
							Nucleus
<i>PoDREB22</i>	247	26823.67	4.82	67.58	57.41	-0.366	细胞核
							Nucleus
<i>PoDREB23</i>	436	48127.6	5.15	40.74	78.17	-0.322	叶绿体
							Chloroplast
<i>PoDREB24</i>	302	33241.62	8.13	54.84	45.89	-0.809	细胞核
							Nucleus
<i>PoDREB25</i>	403	43592.43	6.86	66.64	55.76	-0.542	细胞核
							Nucleus
<i>PoDREB26</i>	300	32524.05	9.08	65.04	80.67	-0.318	叶绿体
							Chloroplast
<i>PoDREB27</i>	284	31120.39	5.22	42.35	48.52	-0.727	细胞核
							Nucleus
<i>PoDREB28</i>	330	36361.19	5.29	47.58	55.09	-0.676	细胞核
							Nucleus
<i>PoDREB29</i>	431	47643.76	5.03	47.5	75.2	-0.401	细胞核
							Nucleus
<i>PoDREB3</i>	198	22188.32	9.55	40.78	65.56	-0.624	细胞核
							Nucleus
<i>PoDREB30</i>	175	19427.69	5.25	56.03	68.63	-0.614	细胞核



<i>PoDREB50</i>	394	44131.39	4.41	45.21	80.48	-0.269	叶绿体 Chloroplast
<i>PoDREB51</i>	297	32579.27	5.75	56.17	74.85	-0.6	细胞核 Nucleus
<i>PoDREB52</i>	211	23709.82	8.57	42.89	72.7	-0.583	细胞核 Nucleus
<i>PoDREB53</i>	255	27754.09	5.71	48.99	70.82	-0.377	细胞核 Nucleus
<i>PoDREB54</i>	173	19260.15	6.08	47.62	49.19	-0.686	细胞核 Nucleus
<i>PoDREB55</i>	167	18542.72	5.49	50.06	71.38	-0.546	细胞质 Cytoplasm
<i>PoDREB6</i>	332	36527.93	4.49	44.36	73.16	-0.372	细胞核 Nucleus
<i>PoDREB7</i>	241	26511.58	5.3	52.63	65.31	-0.564	细胞核 Nucleus
<i>PoDREB8</i>	557	61869.21	5.81	52.02	72.87	-0.602	细胞核 Nucleus
<i>PoDREB9</i>	200	22523.27	4.67	45.42	78.1	-0.536	细胞核 Nucleus
<i>PoERF1</i>	258	29241.98	8.88	53.32	59.77	-0.855	细胞核 Nucleus
<i>PoERF10</i>	352	39541.98	5.23	57.71	62.56	-0.629	细胞核 Nucleus
<i>PoERF11</i>	270	29949.41	5.84	37.54	63.19	-0.584	细胞核 Nucleus
<i>PoERF12</i>	247	27891.53	9.65	58.47	71.5	-0.633	细胞核 Nucleus
<i>PoERF13</i>	211	23441.28	6.71	72.14	67.58	-0.717	细胞核 Nucleus
<i>PoERF14</i>	263	29581.5	9.8	51.63	66.46	-0.521	细胞核 Nucleus
<i>PoERF15</i>	309	33526.09	6	48.77	65.4	-0.503	线粒体 Mitochondrion
<i>PoERF16</i>	202	23160.67	4.75	52.85	62.33	-0.615	细胞核 Nucleus
<i>PoERF17</i>	192	22091.38	5.24	72.27	52.4	-0.831	细胞核 Nucleus
<i>PoERF18</i>	222	25300.24	5.69	57.32	59.73	-0.749	细胞核 Nucleus
<i>PoERF19</i>	182	20945.78	8.9	49.36	70.11	-0.612	细胞核 Nucleus
<i>PoERF2</i>	222	23900.68	8.5	65.34	54.59	-0.754	细胞核 Nucleus

<i>PoERF20</i>	420	44952.07	6.33	62.71	53.93	-0.682	细胞核 Nucleus
<i>PoERF21</i>	244	27611.06	5.84	50.78	68.77	-0.582	细胞核 Nucleus
<i>PoERF22</i>	220	24154.85	8.3	61.63	55.23	-0.689	叶绿体 Chloroplast
<i>PoERF23</i>	246	27245.93	5.78	75.27	57.6	-0.809	细胞核 Nucleus
<i>PoERF24</i>	408	45682.11	4.63	52.28	61.72	-0.78	细胞核 Nucleus
<i>PoERF25</i>	236	26146.49	8.62	72.78	71.06	-0.489	细胞核 Nucleus
<i>PoERF26</i>	248	26944.15	9.41	53.18	59.03	-0.599	细胞核 Nucleus
<i>PoERF27</i>	264	29546.91	5.01	73.11	68.75	-0.477	细胞核 Nucleus
<i>PoERF28</i>	92	10402.13	9.84	56.11	99.67	-0.16	过氧化物酶体 Peroxisome
<i>PoERF29</i>	421	46300.42	5.81	52.28	61.43	-0.532	细胞核 Nucleus
<i>PoERF3</i>	232	25216.98	8.98	65.15	52.37	-0.716	细胞核 Nucleus
<i>PoERF30</i>	191	21107.96	8.44	58.46	79.16	-0.489	叶绿体 Chloroplast
<i>PoERF31</i>	267	30467.3	5.17	56.91	66.82	-0.501	细胞核 Nucleus
<i>PoERF32</i>	256	28630.31	7.71	52.63	73.16	-0.646	细胞核 Nucleus
<i>PoERF33</i>	402	44601.11	4.53	55.08	62.36	-0.671	细胞核 Nucleus
<i>PoERF34</i>	166	18163.67	9.6	53.71	70.54	-0.451	细胞核 Nucleus
<i>PoERF35</i>	168	19145.51	5.98	42.72	62.8	-0.655	细胞核 Nucleus
<i>PoERF36</i>	354	39848.95	9.03	58.44	65.59	-0.517	细胞核 Nucleus
<i>PoERF37</i>	188	20763.48	8.1	67.36	76.38	-0.46	细胞核 Nucleus
<i>PoERF38</i>	213	24320.52	9.37	38.67	75.63	-0.668	细胞核 Nucleus
<i>PoERF39</i>	254	28769.18	5.61	45.04	70.35	-0.691	细胞核 Nucleus
<i>PoERF4</i>	301	33990.2	9.2	59.32	66.41	-0.674	细胞核 Nucleus

<i>PoERF40</i>	422	45788.95	6.35	69.98	46.99	-0.726	细胞核 Nucleus
<i>PoERF41</i>	195	22326.03	5.64	48.65	60.05	-0.641	细胞核 Nucleus
<i>PoERF42</i>	194	22245.8	7.67	50.51	68.87	-0.722	细胞核 Nucleus
<i>PoERF43</i>	262	28674.15	5.82	65.6	65.46	-0.479	细胞核 Nucleus
<i>PoERF44</i>	352	39020.24	4.74	58.79	67.56	-0.627	细胞核 Nucleus
<i>PoERF45</i>	150	17203.01	6.33	49.69	54.07	-0.995	细胞核 Nucleus
<i>PoERF46</i>	285	32921.32	9.39	45.99	56.14	-0.848	细胞核 Nucleus
<i>PoERF47</i>	202	22965.04	9.03	63.01	61.93	-0.695	叶绿体 Chloroplast
<i>PoERF48</i>	228	25802.61	5.21	55.09	61.14	-0.715	细胞核 Nucleus
<i>PoERF49</i>	235	25731.19	9.88	41.24	68	-0.466	细胞核 Nucleus
<i>PoERF5</i>	327	35155.63	4.91	49.74	72.72	-0.368	叶绿体 Chloroplast
<i>PoERF50</i>	215	23966.69	8.59	41.43	57.3	-0.769	细胞核 Nucleus
<i>PoERF51</i>	133	14925.69	5.61	45.28	72.78	-0.602	线粒体 Mitochondrion
<i>PoERF52</i>	250	27672	9.34	48.95	61.28	-0.709	细胞核 Nucleus
<i>PoERF6</i>	227	24927.69	7.12	55.23	60.22	-0.719	细胞核 Nucleus
<i>PoERF7</i>	174	18641.55	9.51	54.15	45.52	-0.859	细胞核 Nucleus
<i>PoERF8</i>	156	17711.65	9.26	55.96	52.69	-1.084	细胞核 Nucleus
<i>PoERF9</i>	249	27874.99	8.24	52.64	53.73	-0.833	细胞核 Nucleus
<i>PoRAV1</i>	391	44018.78	9.22	44.49	73.27	-0.612	细胞核 Nucleus
<i>PoRAV2</i>	366	42271.42	5.78	39.61	67.6	-0.682	细胞核 Nucleus