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Genome wide identification of mungbean (*Vigna radiata* [L.] R. Wilczek) Late Embryogenesis Abundant (LEA) protein gene family

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Supplementary material

Table S1. Physicochemical properties of LEA genes and proteins of *Vigna radiata*.

Sl. No.	Gene position	Gene id	Gene length (kb)	Chromosome no.	Protein length (No. of AA)	Mw (Da)	pI	Protein Group	GRAVY values
1.	4527324 to 4528992	VrLEA1	1.67	1	298	33328	10.0	LEA 2	-0.27
2.	4527466 to 4528772	VrLEA2	1.31		298	33328	10.0	LEA 2	-0.27
3.	4527531 to 4528891	VrLEA3	1.36		298	33328	10.0	LEA 2	-0.27
4.	6166845 to 6169174	VrLEA4	2.33		304	33242	9.67	LEA 2	-0.41
5.	6166876 to 6169034	VrLEA5	2.16		304	33242	9.67	LEA 2	-0.41
6.	6167022 to 6168442	VrLEA6	1.42		304	33242	9.67	LEA 2	-0.41
7.	6167022 to 6168729	VrLEA7	1.71		304	33242	9.67	LEA 2	-0.41
8.	6465993 to 6469571	VrLEA8	3.58		245	27535	8.38	LEA 2	-0.04
9.	6466017 to 6471162	VrLEA9	5.15		245	27535	8.38	LEA 2	-0.04
10.	6466079 to 6469288	VrLEA10	3.21		245	27535	8.38	LEA 2	-0.04
11.	6466343 to 6467497	VrLEA11	1.16		245	27535	8.38	LEA 2	-0.04
12.	7658328 to 7660556	VrLEA12	2.23		298	33328	10.0	LEA 2	-0.27
13.	7658353 to 7660658	VrLEA13	2.31		298	33328	10.0	LEA 2	-0.27
14.	7658405 to 7660572	VrLEA14	2.17		298	33328	10.0	LEA 2	-0.27
15.	7658436 to 7660571	VrLEA15	2.14		298	33328	10.0	LEA 2	-0.25
16.	8007699 to 8011873	VrLEA16	4.17		316	35070	8.93	VPS 26	0.06
17.	8007700 to 8011996	VrLEA17	4.29		316	35070	8.93	VPS 26	0.06
18.	8007714 to 8011996	VrLEA18	4.28		316	35070	8.93	VPS 26	0.06
19.	8007792 to 8011966	VrLEA19	4.17		316	35070	8.93	VPS 26	0.06
20.	8150389 to 8160397	VrLEA20	10.0		520	59320	8.44	PPR 2	0.06
21.	8150393 to 8160362	VrLEA21	9.97		520	59320	8.44	PPR 2	0.06
22.	8150393 to 8160395	VrLEA22	10.0		520	59320	8.44	PPR 2	0.06
23.	8150394 to 8151016	VrLEA23	0.62		208	24333	9.61	LEA 2	-0.15
24.	8150452 to 8160193	VrLEA24	9.74		520	59320	8.44	PPR 2	0.06
25.	8150505 to 8160405	VrLEA25	9.90		520	59320	8.44	PPR 2	0.06
26.	8159782 to 8160405	VrLEA26	0.62		207	23920	9.75	LEA 2	-0.01
27.	12565395 to 12565964	VrLEA27	0.57		65	6859	6.52	No protein	-1.06
28.	12681477 to 12682716	VrLEA28	1.24		67	6859	6.52	No protein	-1.06
29.	12681559 to 12682653	VrLEA29	1.09		67	6859	6.52	No protein	-1.06
30.	12681564 to12682698	VrLEA30	1.14		67	6859	6.52	No protein	-1.06

Sl. No.	Gene Position	Gene id	Gene Length (kb)	Chromosome no.	Protein length (No. of AA)	Mw (Da)	pI	Protein group	GRAVY values
31.	12681667 to 12681882	VrLEA31	0.22	1	508	56223	7.12	MFS 1	0.28
32.	12716182 to 12716651	VrLEA32	0.47		65	6859	6.52	No protein	-1.06
33.	2013743 to 20146223	VrLEA33	8.79		600	66563	5.52	LRRNT 2/Pkinase	-0.16
34.	20137505 to 20146343	VrLEA34	8.84		600	66563	5.52	LRRNT 2/Pkinase	-0.16
35.	20137645 to 20146150	VrLEA35	8.51		600	66563	5.52	LRRNT 2/Pkinase	-0.16
36.	20140435 to 20143567	VrLEA36	3.13		622	68931	5.52	LRRNT 2/Pkinase	-0.16
37.	251514 to 254879	VrLEA37	3.37	2	409	45390	9.34	DUF4149	-0.36
38.	251940 to 253418	VrLEA38	1.48		409	45390	9.34	DUF4149	-0.36
39.	252639 to 253338	VrLEA39	0.70		409	45390	9.34	DUF4149	-0.36
40.	252646 to 253387	VrLEA40	0.74		409	45390	9.34	DUF4149	-0.36
41.	1199624 to 1203049	VrLEA41	3.49		427	46834	7.68	Abhydrolase 1	-0.09
42.	1931297 to 1933434	VrLEA42	2.14		315	35726	9.87	LEA 2	-0.45
43.	1931303 to 1933598	VrLEA43	2.30		315	35726	9.87	LEA 2	-0.45
44.	1931507 to 1933434	VrLEA44	1.93		315	35726	9.87	LEA 2	-0.45
45.	1931511 to 1933443	VrLEA45	1.93		315	35726	9.87	LEA 2	-0.45
46.	6050534 to 6055598	VrLEA46	5.07		332	36980	8.66	Rootcap	-0.89
47.	6054234 to 6055579	VrLEA47	1.35		332	36980	8.66	Rootcap	-0.89
48.	6054412 to 6055314	VrLEA48	0.90		332	36980	8.66	Rootcap	-0.89
49.	8904027 to 8904668	VrLEA49	0.64		213	24003	9.19	No protein	-0.12
50.	8916131 to 8926419	VrLEA50	10.3		207	23147	9.67	LEA 2	0.19
51.	8925516 to 8926504	VrLEA51	0.99		207	23147	9.67	LEA 2	0.19
52.	8925756 to 8927004	VrLEA52	1.25		207	23147	9.67	LEA 2	0.19
53.	8925801 to 8926504	VrLEA53	0.70		207	23147	9.67	LEA 2	0.19
54.	9284991 to 9285980	VrLEA54	0.99		235	25905	7.16	LEA 2	0.12
55.	9839174 to 9839830	VrLEA55	0.66		218	24267	9.72	LEA 2	0.16
56.	9839351 to 9839808	VrLEA56	0.46		218	24267	9.72	LEA 2	0.16
57.	14436420 to 14437000	VrLEA57	0.58		207	22881	10.1	No protein	0.22
58.	14436445 to 14436975	VrLEA58	0.53		207	22881	10.1	No protein	0.22
59.	20988420 to 20996858	VrLEA59	8.44		338	37701	7.84	Rootcap	-0.30
60.	20995579 to 20996858	VrLEA60	1.28		338	37701	7.84	Rootcap	-0.30

Sl. No.	Gene Position	Gene id	Gene length (kb)	Chromosome No.	Protein length (AA)	Mw (Da)	pI	Protein group	GRAVY values
61.	20995590 to 20996854	VrLEA61	1.26	2	338	37701	7.84	Rootcap	-0.30
62.	20996089 to 20996854	VrLEA62	0.77		338	37701	7.84	Rootcap	-0.30
63.	21071243 to 21072882	VrLEA63	1.64		340	37843	7.43	Rootcap	-0.27
64.	21071259 to 21073079	VrLEA64	1.82		340	37843	7.43	Rootcap	-0.27
65.	21071265 to 21073056	VrLEA65	1.79		340	37843	7.43	Rootcap	-0.27
66.	228276 to 240990	VrLEA66	12.7	3	162	16848	9.21	LEA 1	-0.92
67.	228476 to 240977	VrLEA67	12.5		162	16848	9.21	LEA 1	-0.92
68.	228588 to 240982	VrLEA68	12.4		162	16848	9.21	LEA 1	-0.92
69.	5538569 to 5539705	VrLEA69	1.14		306	33573	6.90	LEA 4	-1.11
70.	5538632 to 5539647	VrLEA70	1.02		306	33573	6.90	LEA 4	-1.11
71.	5538635 to 5538951	VrLEA71	0.32		306	33573	6.90	LEA 4	-1.11
72.	5538642 to 5539647	VrLEA72	1.01		306	33573	6.90	LEA 4	-1.11
73.	6513840 to 6514933	VrLEA73	1.09		221	25159	9.19	LEA 2	-0.05
74.	6513994 to 6514819	VrLEA74	0.83		221	25159	9.19	LEA 2	-0.05
75.	6514073 to 6514819	VrLEA75	0.75		221	25159	9.19	LEA 2	-0.05
76.	6522337 to 6531893	VrLEA76	9.56		226	26008	8.45	LEA 2	-0.28
77.	6522470 to 6523068	VrLEA77	0.60		226	26008	8.45	LEA 2	-0.28
78.	6522470 to 6523150	VrLEA78	0.68		226	26008	8.45	LEA 2	-0.28
79.	6522526 to 6523053	VrLEA79	0.53		226	26008	8.45	LEA 2	-0.28
80.	6522526 to 6523061	VrLEA80	0.54		226	26008	8.45	LEA 2	-0.28
81.	6522528 to 6523150	VrLEA81	0.62		226	26008	8.45	LEA 2	-0.28
82.	6522531 to 6523155	VrLEA82	0.63		226	26008	8.45	LEA 2	-0.28
83.	6522594 to 6523056	VrLEA83	0.46		226	26008	8.45	LEA 2	-0.28
84.	6522686 to 6523194	VrLEA84	0.51		226	26008	8.45	LEA 2	-0.28
85.	6522702 to 6523194	VrLEA85	0.49		226	26008	8.45	LEA 2	-0.28
86.	6534207 to 6535522	VrLEA86	1.32		209	23666	9.78	LEA 2	0.01
87.	6534375 to 6535313	VrLEA87	0.94		209	23666	9.78	LEA 2	0.01
88.	6534416 to 6535424	VrLEA88	1.01		209	23666	9.78	LEA 2	0.01
89.	6534678 to 6535307	VrLEA89	0.63		209	23666	9.78	LEA 2	0.01
90.	6545286to 6546170	VrLEA90	0.89		294	32913	6.03	No protein	-0.39
91.	7536873 to 7536985	VrLEA91	0.11		114	12788	9.39	LEA 3	-0.53

Sl. No.	Gene Position	Gene id	Gene length (kb)	Chromosome No.	Protein length (AA)	Mw (Da)	pI	Protein group	GRAVY values
92.	7541252 to 7541875	VrLEA92	0.62	3	103	10949	9.52	LEA 3	-0.27
93.	7541296 to 7541678	VrLEA93	0.38		103	10949	9.52	LEA 3	-0.27
94.	7541297 to 7541631	VrLEA94	0.33		103	10949	9.52	LEA 3	-0.27
95.	7541306 to 7541698	VrLEA95	0.40		103	10949	9.52	LEA 3	-0.27
96.	891102 to 891621	VrLEA96	0.52	4	112	12123	7.96	LEA 5	-1.33
97.	11395043 to 11397315	VrLEA97	2.27		196	21127	9.36	LEA 2	0.38
98.	11396935 to 11397331	VrLEA98	0.40		196	21127	9.36	LEA 2	0.38
99.	11398606 to 11399362	VrLEA99	0.76		223	24621	9.53	LEA 2	0.08
100.	11398607 to 11399471	VrLEA100	0.87		223	24621	9.53	LEA 2	0.08
101.	11398673 to 11399344	VrLEA101	0.67		223	24621	9.53	LEA 2	0.08
102.	15121332 to 15127845	VrLEA102	6.51		919	104937	5.93	No protein	-0.55
103.	15121411 to 15122367	VrLEA103	0.96		957	81346	4.99	LEA 2	0.69
104.	15121416 to 15122244	VrLEA104	0.83		176	19142	6.57	LEA 2	0.20
105.	15762550 to 15763221	VrLEA105	0.67		150	15851	9.19	No protein	-0.66
106.	15762562 to 15763221	VrLEA106	0.66		150	15851	9.19	No protein	-0.66
107.	15762563 to 15763249	VrLEA107	0.69		150	15851	9.19	No protein	-0.66
108.	18860609 to 18861422	VrLEA108	0.81		85	8855	4.49	No protein	-0.96
109.	18860683 to 18861351	VrLEA109	0.67		85	8855	4.49	No protein	-0.96
110.	18860805 to 18861334	VrLEA110	0.53		85	8855	4.49	No protein	-0.96
111.	18885604 to 18886378	VrLEA111	0.78		66	6673	6.53	No protein	-1.02
112.	20782456 to 20784750	VrLEA112	2.29		220	24805	8.66	LRR 8	-0.25
113.	402015 to 402910	VrLEA113	0.90	5	197	21339	9.93	LEA 2	0.35
114.	402123 to 402866	VrLEA114	0.74		197	21339	9.93	LEA 2	0.35
115.	402180 to 402768	VrLEA115	0.59		197	21339	9.93	LEA 2	0.35
116.	1027108 to 1027851	VrLEA116	0.74		93	9670	10.1	LEA 3	-0.49
117.	1027116 to 1027879	VrLEA117	0.76		93	9670	10.2	LEA 3	-0.49
118.	1027297 to 1027863	VrLEA118	0.57		93	9670	10.2	LEA 3	-0.49
119.	15045318 to 15046361	VrLEA119	1.04		251	27664	9.62	LEA 2	-0.30
120.	15045356t to 15046111	VrLEA120	0.76		251	27664	9.62	LEA 2	-0.30

Sl. No.	Gene Position	Gene id	Gene length (kb)	Chromosome No.	Protein length (AA)	Mw (Da)	pI	Protein group	GRAVY values
121.	20658192 to 20659775	VrLEA121	1.58	5	260	28597	9.84	LEA 2	-0.14
122.	20658260 to 20659645	VrLEA122	1.39		260	28597	9.84	LEA 2	-0.14
123.	20658655 to 20659815	VrLEA123	1.16		260	28597	9.84	LEA 2	-0.14
124.	23198760 to 23206105	VrLEA124	7.35		432	47167	8.73	MFS 1	0.74
125.	23921944 to 23922675	VrLEA125	0.73		197	21228	6.76	Dehydrin	-1.05
126.	27214192 to 27215683	VrLEA126	1.49		176	18241	5.01	SMP	-0.46
127.	27214310 to 27215407	VrLEA127	1.10		176	18241	5.01	SMP	-0.46
128.	31094461 to 31095075	VrLEA128	0.62		110	11899	9.16	LEA	-1.44
129.	31094524 to 31095035	VrLEA129	0.51		110	11899	9.16	LEA	-1.44
130.	31094552 to 31095038	VrLEA130	0.49		110	11899	9.16	LEA	-1.44
131.	31094755 to 31094985	VrLEA131	0.23		110	11899	9.16	LEA	-1.44
132.	31094758 to 31094955	VrLEA132	0.20		110	11899	9.16	LEA	-1.44
133.	31448692 to 31449935	VrLEA133	1.24		199	22244	9.54	LEA 2	0.41
134.	31518784 to 31520750	VrLEA134	1.97		309	34234	9.88	LEA 2	-0.34
135.	31448864 to 31449558	VrLEA135	0.70		199	22244	9.54	LEA 2	0.41
136.	31448867 to 31449882	VrLEA136	1.02		199	22244	9.54	LEA 2	0.41
137.	31518880 to 31520477	VrLEA137	1.60		309	34234	9.88	LEA 2	-0.34
138.	31518902 to 31520677	VrLEA138	1.78		309	34234	9.88	LEA 2	-0.34
139.	31519142 to 31520477	VrLEA139	1.34		309	34234	9.88	LEA 2	-0.34
140.	32182042 to 32183481	VrLEA140	1.44		250	27359	10.3	LEA 2	-0.12
141.	32182048 to 32183400	VrLEA141	1.35		250	27359	10.3	LEA 2	-0.12
142.	32182217 to 32183192	VrLEA142	0.98		250	27359	10.3	LEA 2	-0.12
143.	32598111 to 32598601	VrLEA143	0.49		75	8097	6.84	LEA	-0.57
144.	34848212 to 34848674	VrLEA144	0.46		186	20662	7.68	LEA 2	0.44
145.	34848212 to34848676	VrLEA145	0.47		186	20662	7.68	LEA 2	0.44
146.	34848212 to 34848772	VrLEA146	0.56		186	20662	7.68	LEA 2	0.44
147.	34848214 to 34848491	VrLEA147	0.28		186	20662	7.68	LEA 2	0.44
148.	766240 to 767291	VrLEA148	1.05	6	231	26418	10.3	LEA 2	-0.06
149.	766285 to 767101	VrLEA149	0.82		231	26418	10.3	LEA 2	-0.06
150.	766339 to 767012	VrLEA150	0.67		231	26418	10.3	LEA 2	-0.06
151.	3029345 to 3032057	VrLEA151	2.71		314	34849	4.74	LEA 2	-0.38

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152.	3029438 to 3031782	VrLEA152	2.35	6	314	34849	4.74	LEA 2	-0.38
153.	3029448 to 3031704	VrLEA153	2.26		314	34849	4.74	LEA 2	-0.38
154.	3029946 to 3031789	VrLEA154	1.84		314	34849	4.74	LEA 2	-0.35
155.	3424229 to 3428687	VrLEA155	4.46		218	23791	5.31	LRR	-0.13
156.	3474729 to 3475735	VrLEA156	1.01		273	30479	9.30	LRR	-0.24
157.	3474740 to 3475833	VrLEA157	1.09		273	30479	9.30	LRR	-0.24
158.	3474842 to 3475692	VrLEA158	0.85		273	30479	9.30	LRR	-0.24
159.	3474873 to 3475694	VrLEA159	0.82		273	30479	9.30	LRR	-0.24
160.	7744276 to 7745355	VrLEA160	1.08		259	29095	9.75	LEA 2	-0.20
161.	7744289 to 7745360	VrLEA161	1.07		259	29095	9.75	LEA 2	-0.20
162.	7744513 to 7745292	VrLEA162	0.78		259	29095	9.75	LEA 2	-0.20
163.	4539317 to 4539940	VrLEA163	0.62	7	207	22676	9.21	LEA 2	0.14
164.	4539317 to 4539928	VrLEA164	0.61		207	22676	9.21	LEA 2	0.14
165.	4539317 to 4546958	VrLEA165	7.64		207	22676	9.21	LEA 2	0.14
166.	27637198 to 27638635	VrLEA166	1.44		322	35547	10.0	LEA 2	-0.35
167.	27637226 to 27638733	VrLEA167	1.50		322	35547	10.0	LEA 2	-0.35
168.	27637341 to 27638457	VrLEA168	1.12		322	35547	10.0	LEA 2	-0.35
169.	28453153 to 28453806	VrLEA169	0.65		112	12512	9.58	LEA 6	-1.34
170.	28453520 to 28453907	VrLEA170	0.39		112	12512	9.58	LEA 6	-1.34
171.	40668842 to 40669579	VrLEA171	0.74		245	27202	9.04	No Protein	-0.07
172.	40668920 to 40669519	VrLEA172	0.60		245	27202	9.04	No Protein	-0.07
173.	40669297 to 40669516	VrLEA173	0.22		245	27202	9.04	No Protein	-0.07
174.	47328437 to 47330075	VrLEA174	1.64		398	43018	8.00	No Protein	-1.13
175.	47328449 to 47329103	VrLEA175	0.66		398	43018	8.00	No Protein	-1.13
176.	47328507 to 7329637	VrLEA176	1.13		398	43018	8.00	No Protein	-1.13
177.	47328507 to 47329966	VrLEA177	1.46		398	43018	8.00	No Protein	-1.13
178.	47329314 to 47330049	VrLEA178	0.74		398	43018	8.00	No Protein	-1.13
179.	48516789 to 48517201	VrLEA179	0.41		95	10437	9.98	LEA 3	-0.56
180.	48516791 to 48517523	VrLEA180	0.73		95	10437	9.98	LEA 3	-0.56
181.	48516997 to 48517201	VrLEA181	0.21		95	10437	9.98	LEA 3	-0.56
182.	48516969 to 48517342	VrLEA182	0.37		95	10437	9.98	LEA 3	-0.56

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183.	53219071 to 53227964	VrLEA183	8.89	7	570	64193	5.85	UBIQUITIN	-0.35
184.	53227205 to 53228099	VrLEA184	0.90		250	27186	9.32	LEA 2	0.39
185.	53227212 to 53227964	VrLEA185	0.75		250	27186	9.32	LEA 2	0.39
186.	53227288 to 53228099	VrLEA186	0.81		250	27186	9.32	LEA 2	0.39
187.	54733062 to 54733990	VrLEA187	0.93		133	15166	8.77	HMA	-0.99
188.	54815914 to 54834118	VrLEA188	18.2		223	24620	8.56	LEA 2	-0.14
189.	54826318 to 54827232	VrLEA189	0.92		223	24620	8.56	LEA 2	-0.14
190.	54826340 to 54827311	VrLEA190	0.97		223	24620	8.56	LEA 2	-0.14
191.	54826395 to 54827232	VrLEA191	0.84		223	24620	8.56	LEA 2	-0.14
192.	54826423 to 54827360	VrLEA192	0.94		223	24620	8.56	LEA 2	-0.14
193.	54833313 to 54834250	VrLEA193	7.83		223	24620	8.56	LEA 2	-0.14
194.	1414742 to 1415653	VrLEA194	0.91	8	237	26790	9.50	LEA 2	0.07
195.	1414895 to 1415603	VrLEA195	0.71		237	26790	9.50	LEA 2	0.07
196.	1414936 to 1415605	VrLEA196	0.67		237	26790	9.50	LEA 2	0.07
197.	1414976 to 1415603	VrLEA197	0.63		237	26790	9.50	LEA 2	0.07
198.	1425994 to 1433787	VrLEA198	7.79		224	25553	9.30	LEA 2	0.04
199.	1426187 to 1440289	VrLEA199	14.1		224	25553	9.30	LEA 2	0.04
200.	1432983 to 1433566	VrLEA200	0.58		224	25553	9.30	LEA 2	0.04
201.	1439596 to 1440283	VrLEA201	0.69		228	26098	9.29	LEA 2	-0.21
202.	1439602 to 1440288	VrLEA202	0.69		228	26098	9.29	LEA 2	-0.21
203.	1455925 to 1457304	VrLEA203	1.38		209	23802	10.1	LEA 2	0.12
204.	1456575 to 1457418	VrLEA204	0.84		209	23802	10.1	LEA 2	0.12
205.	1498117 to 1499142	VrLEA205	1.03		279	30871	8.34	No Protein	-0.35
206.	2923758 to 2924781	VrLEA206	1.02		207	21282	5.1	LEA 1	-0.79
207.	2923801 to 2924589	VrLEA207	0.79		207	21282	5.1	LEA 1	-0.79
208.	9810283 to 9819763	VrLEA208	9.48		88	91880	5.70	No Protein	-0.89
209.	9819209 to 9819875	VrLEA209	0.67		88	91880	5.70	No Protein	-0.89
210.	9819210 to 9819757	VrLEA210	0.55		88	91880	5.70	No Protein	-0.89
211.	9819244 to 9819817	VrLEA211	0.57		88	91880	5.70	No Protein	-0.89
212.	13671718 to 13673582	VrLEA212	1.86		511	55076	5.67	LEA 4	-1.14
213.	13672424 to 13673678	VrLEA213	1.25		511	55076	5.67	LEA 4	-1.42

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214.	13672969 to 13673443	VrLEA214	0.48	8	511	55076	5.67	LEA 4	-1.14
215.	13673063 to 13673588	VrLEA215	0.53		511	55076	5.67	LEA 4	-1.14
216.	26042189 to 26043371	VrLEA216	1.18		257	26713	5.07	SMP	-0.39
217.	28125637 to 28129638	VrLEA217	4.0		99	10143	9.99	LEA 3	-0.34
218.	28125667 to 28126368	VrLEA218	0.70		99	10143	9.99	LEA 3	-0.34
219.	28125703 to 28126598	VrLEA219	0.90		99	10143	9.99	LEA 3	-0.34
220.	28125728 to 28126503	VrLEA220	0.78		99	10143	9.99	LEA 3	-0.34
221.	28712825 to 28715251	VrLEA221	2.43		208	23127	9.79	DUF	0.30
222.	28712862 to 28715287	VrLEA222	2.43		208	23127	9.79	DUF	0.30
223.	28712989 to 28715128	VrLEA223	2.14		208	23127	9.79	DUF	0.30
224.	31172128 to 31172433	VrLEA224	0.31		247	26726	9.56	LEA 2	0.07
225.	32608503 to 32609812	VrLEA225	1.31		238	24600	5.48	SMP	-0.36
226.	33977518 to 33978782	VrLEA226	1.26		249	27790	9.62	LEA 2	0.01
227.	33977697 to 33978676	VrLEA227	0.98		249	27790	9.62	LEA 2	0.01
228.	33977858 to 33978607	VrLEA228	0.75		249	27790	9.62	LEA 2	0.01
229.	36939111 to 36944053	VrLEA229	4.94		447	49185	7.50	MFS1	0.66
230.	38197657 to 38203300	VrLEA230	5.64		369	40837	5.43	Methyltransferase 1	-0.05
231.	38232165 to 38240530	VrLEA231	8.37		570	63739	8.00	Abhydrolase 1	0.03
232.	38577520 to 38590335	VrLEA232	12.8		358	40048	5.51	LST 1	-0.64
233.	38583492 to 38590333	VrLEA233	6.84		624	68955	5.47	P kinase	-0.14
234.	38583495 to 38590306	VrLEA234	6.81		624	68955	5.47	P kinase	-0.14
235.	38583617 to 38590319	VrLEA235	6.70		624	68955	5.47	P kinase	-0.14
236.	40335901 to 40337063	VrLEA236	1.16		137	15617	8.34	HMA	-0.72
237.	41683388 to 41684336	VrLEA237	0.95		227	25953	9.17	LEA 2	-0.30
238.	41683646 to 41684390	VrLEA238	0.75		227	25953	9.17	LEA 2	-0.30
239.	41683651 to 41684460	VrLEA239	0.81		227	25953	9.17	LEA 2	-0.30
240.	42232996 to 2235667	VrLEA240	2.67		270	30295	6.54	LRRNT	-0.01
241.	42259847 to 42260671	VrLEA241	0.83		102	11226	9.68	LEA 3	-0.53
242.	42259974 to 42260451	VrLEA242	0.48		102	11226	9.68	LEA 3	-0.53
243.	44401062 to 44406383	VrLEA243	5.32		408	43669	9.21	MFS 1	0.68
244.	26042244 to 26043445	SMP	1.06	8	257	26713	5.07	SMP	-0.39

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245.	671056 to 671523	VrLEA244	0.47	9	100	11564	4.68	No Protein	-1.32
246.	671083 to 671523	VrLEA245	0.44		100	11564	4.68	No Protein	-1.32
247.	891473 to 896116	VrLEA246	1.50		152	17270	8.57	SYS 1	0.92
248.	891473 to 896116	VrLEA247	0.34		152	17270	8.57	SYS 1	0.92
249.	891557 to 896131	VrLEA248	4.64		152	17270	8.57	SYS 1	0.92
250.	926623 to 928127	VrLEA249	4.66		188	21046	7.69	No Protein	0.28
251.	927671 to 928010	VrLEA250	4.58		188	21046	7.69	No Protein	0.28
252.	1863340 to 1864110	VrLEA251	0.77		252	27503	9.04	LEA 2	-0.15
253.	1863354 to 1864106	VrLEA252	0.75		252	27503	9.04	LEA 2	-0.15
254.	3015478 to 3015900	VrLEA253	0.42		296	32835	9.51	NK superfamily	-0.14
255.	5352159 to 5353309	VrLEA254	1.15		219	24386	10.4	LEA 2	-0.002
256.	5352384 to 5353266	VrLEA255	0.88		219	24386	10.4	LEA 2	-0.002
257.	5352428 to 5353024	VrLEA256	0.60		219	24386	10.4	LEA 2	-0.002
258.	5352462 to 5353144	VrLEA257	0.68		219	24386	10.4	LEA 2	-0.002
259.	5352476 to 5353135	VrLEA258	0.66		219	24386	10.4	LEA 2	-0.002
260.	5352578 to 5353050	VrLEA259	0.47		219	24386	10.4	LEA 2	-0.002
261.	5360988 to 5362471	VrLEA260	1.48		152	16887	6.58	LEA 2	-0.04
262.	5360988 to 5362475	VrLEA261	1.49		152	16887	6.58	LEA 2	-0.04
263.	5360989 to 5362503	VrLEA262	1.51		152	16887	6.58	LEA 2	-0.04
264.	12129728 to 12131266	VrLEA263	1.54		512	29869	8.19	NBARC	-0.22
265.	19292626 to 19293164	VrLEA264	0.54		99	10872	5.91	LEA 5	-1.46
266.	7867598 to 7868690	VrLEA265	1.09	10	254	28820	10.0	LEA 2	-0.10
267.	7867712 to 7868476	VrLEA266	0.77		254	28820	10.0	LEA 2	-0.10
268.	10121934 to 10125163	VrLEA267	3.23		247	27568	5.05	No Protein	-0.02
269.	10123756 to 10124986	VrLEA268	1.23		247	27568	5.05	No Protein	-0.02
270.	10123798 to 10125008	VrLEA269	1.21		247	27568	5.05	No Protein	-0.02
271.	10123803 to 10125007	VrLEA270	1.21		247	27568	5.05	No Protein	-0.02
272.	10658133 to 10659074	VrLEA271	0.94		243	27459	9.93	LEA 2	-0.17
273.	10658293 to 10659117	VrLEA272	0.83		243	27459	9.93	LEA 2	-0.17
274.	10658323 to 10659054	VrLEA273	0.73		243	27459	9.93	LEA 2	-0.17
275.	10658338 to 10659180	VrLEA274	0.84		243	27459	9.93	LEA 2	-0.17

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276.	14222479 to14239453	VrLEA275	17.0	10	1093	123062	7.82	RVP	-0.13
277.	14222492 to 14239417	VrLEA276	16.9		848	95602	7.00	RVP	-0.43
278.	14222507 to14239411	VrLEA277	19.9		848	95602	7.00	RVP	-0.43
279.	18414582 to 18416729	VrLEA278	2.15		222	24521	6.87	No Protein	-1.20
280.	18415689 to 18416833	VrLEA279	1.15		222	24521	6.87	No Protein	-1.20
281.	18415754 to 18416221	VrLEA280	0.47		222	24521	6.87	No Protein	-1.20
282.	18415757 to 18416040	VrLEA281	0.28		222	24521	6.87	No Protein	-1.20
283.	18415757 to 18416732	VrLEA282	0.98		222	24521	6.87	No Protein	-1.20
284.	19204218 to 19205054	VrLEA283	0.84		201	22927	9.69	LEA 2	-0.01
285.	19204262 to 19226373	VrLEA284	22.1		850	94629	6.36	Lectin	-0.27
286.	19204277 to 19204850	VrLEA285	0.57		201	22927	9.69	LEA 2	-0.01
287.	20284941 to 20287648	VrLEA286	2.71		247	26726	9.56	LEA 2	0.07
288.	20284996 to 20287619	VrLEA287	2.62		247	26726	9.56	LEA 2	0.07
289.	20285096 to 20287619	VrLEA288	2.52		222	24521	6.87	No Protein	-1.20
290.	424429 to 425004	VrLEA289	0.58	11	202	23081	9.73	LEA 2	-0.41
291.	424454 to 425004	VrLEA290	0.55		202	23081	9.73	LEA 2	-0.41
292.	424565 to 425073	VrLEA291	0.51		202	23081	9.73	LEA 2	-0.41
293.	564121 to 564584	VrLEA292	0.46		186	20662	7.68	LEA 2	0.45
294.	564127 to 564520	VrLEA293	0.39		186	20662	7.68	LEA 2	0.45
295.	1373964 to 1374811	VrLEA294	0.85		236	26073	9.22	LEA 2	0.51
296.	1374035 to 1374839	VrLEA295	0.81		236	26073	9.22	LEA 2	0.51
297.	1374035 to 1374840	VrLEA296	0.81		236	26073	9.22	LEA 2	0.51
298.	1374051 to 1375049	VrLEA297	1.00		236	26073	9.22	LEA 2	0.51
299.	1725902 to 1726522	VrLEA298	0.62		206	23405	9.83	LEA 2	-0.16
300.	1725907 to 1726492	VrLEA299	0.59		206	23405	9.83	LEA 2	-0.16
301.	1735502 to 1736018	VrLEA300	0.52		187	20879	9.84	LEA 2	0.04
302.	5608000 to 5610079	VrLEA301	2.08		240	25966	4.57	No Protein	-1.05
303.	5608083 to 5609312	VrLEA302	1.23		240	25966	4.57	No Protein	-1.05
304.	5608445 to 5609314	VrLEA303	0.87		240	25966	4.57	No Protein	-1.05
305.	8001112 to 8002245	VrLEA304	1.13		228	25688	9.35	LEA 2	-0.29
306.	8001433 to 8002037	VrLEA305	0.61		228	25688	9.35	LEA 2	-0.29
307.	8001560 to 8002039	VrLEA306	0.48		228	25688	9.35	LEA 2	-0.29