

Supplementary Material

Table S1. Uniprot protein information arranged by group.

UniProt	Class	Domain	ID	gene	length
A0A1D6E657	NLRGroup	PIC17	tr A0A1D6E657 A0A1D6E657_MAIZE Disease resistance gene analog PIC17 OS=Zea mays OX=4577 GN=LOC103646229 PE=1 SV=1	LOC103646229	1002
A0A1D6IBJ7	NLRGroup	4	tr A0A1D6IBJ7 A0A1D6IBJ7_MAIZE Disease resistance RPP13-like protein 4 OS=Zea mays OX=4577 GN=LOC103633174 PE=3 SV=1	LOC103633174	1113
A0A1D6N9M6	NLRGroup	PIC21	tr A0A1D6N9M6 A0A1D6N9M6_MAIZE Disease resistance gene analog PIC21 OS=Zea mays OX=4577 GN=LOC103651126 PE=1 SV=1	LOC103651126	908
A0A317Y0I6	NLRGroup	RPS2	tr A0A317Y0I6 A0A317Y0I6_MAIZE Disease resistance protein RPS2 OS=Zea mays OX=4577 GN=RPS2_4 PE=3 SV=1	RPS2_4	1022
A0A317YA01	NLRGroup	(Fragment)	tr A0A317YA01 A0A317YA01_MAIZE Putative disease resistance protein RGA4 (Fragment) OS=Zea mays OX=4577 GN=RGA4_3 PE=3 SV=1	RGA4_3	939
A0A3L6DXL4	NLRGroup	RGA3	tr A0A3L6DXL4 A0A3L6DXL4_MAIZE Putative disease resistance protein RGA3 OS=Zea mays OX=4577 GN=RGA3_10 PE=3 SV=1	RGA3_10	1113
A0A3L6FR37	NLRGroup	RPS2	tr A0A3L6FR37 A0A3L6FR37_MAIZE Disease resistance protein RPS2 OS=Zea mays OX=4577 GN=RPS2_0 PE=3 SV=1	RPS2_0	1002
A0A804LH89	NLRGroup	RPS2	tr A0A804LH89 A0A804LH89_MAIZE Disease resistance protein RPS2 OS=Zea mays OX=4577 GN=LOC103633703 PE=1 SV=1	LOC103633703	913
A0A804MDK0	NLRGroup	protein	tr A0A804MDK0 A0A804MDK0_MAIZE AAA+ ATPase domain-containing protein OS=Zea mays OX=4577 GN=LOC103646229 PE=1 SV=1	LOC103646229	923
K7UCK5	NLRGroup	protein	tr K7UCK5 K7UCK5_MAIZE NBS-LRR type disease resistance protein OS=Zea mays OX=4577 GN=LOC606485 PE=3 SV=1	LOC606485	910
Q5BMB3	PLOStarget	protein	tr Q5BMB3 Q5BMB3_MAIZE RXO1 disease resistance protein OS=Zea mays OX=4577 GN=rxo1 PE=1 SV=1	RXO1	905
A0A172Q4R0	NLRGroup	CCoAOMT2	tr A0A172Q4R0 A0A172Q4R0_MAIZE CCoAOMT2 OS=Zea mays OX=4577 GN=CCoAOMT2 PE=2 SV=1	CCoAOMT2	261
A0A172QB57	NLRGroup	CCoAOMT2	tr A0A172QB57 A0A172QB57_MAIZE CCoAOMT2 OS=Zea mays OX=4577 GN=CCoAOMT2 PE=2 SV=1	CCoAOMT2	266
A0A172QB77	NLRGroup	CCoAOMT2	tr A0A172QB77 A0A172QB77_MAIZE CCoAOMT2 OS=Zea mays OX=4577 PE=2 SV=1	OTHER	258
A0A1D6EE37	NLRGroup	protein	tr A0A1D6EE37 A0A1D6EE37_MAIZE Disease resistance protein At4g27190-like leucine-rich repeats domain-containing protein OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d004127 PE=4 SV=1	ZEAMMB73_ZM00001D004127	1070
A0A1D6F078	NLRGroup	4	tr A0A1D6F078 A0A1D6F078_MAIZE Disease resistance RPP13-like protein 4 OS=Zea mays OX=4577 GN=LOC103647804 PE=3 SV=1	LOC103647804	1066
A0A1D6F6R4	NLRGroup	RPS2	tr A0A1D6F6R4 A0A1D6F6R4_MAIZE Disease resistance protein RPS2 OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d007491 PE=4 SV=1	ZEAMMB73_ZM00001D007491	1046

A0A1D6F6R7	NLRGroup	RPS2	tr A0A1D6F6R7 A0A1D6F6R7_MAIZE Disease resistance protein RPS2 OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d007495 PE=4 SV=1	ZEAMMB73_ZM00001D007495	985
A0A1D6F7M4	NLRGroup	RPS2	tr A0A1D6F7M4 A0A1D6F7M4_MAIZE Disease resistance protein RPS2 OS=Zea mays OX=4577 GN=LOC100216844 PE=4 SV=1	LOC100216844	1038
A0A1D6GVA7	NLRGroup	protein	tr A0A1D6GVA7 A0A1D6GVA7_MAIZE L-zip+NBS+LRR-like protein OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d014687 PE=3 SV=1	ZEAMMB73_ZM00001D014687	1384
A0A1D6GVA8	NLRGroup	protein	tr A0A1D6GVA8 A0A1D6GVA8_MAIZE L-zip+NBS+LRR-like protein OS=Zea mays OX=4577 GN=LOC103626411 PE=3 SV=1	LOC103626411	1444
A0A1D6GVB0	NLRGroup	protein	tr A0A1D6GVB0 A0A1D6GVB0_MAIZE L-zip+NBS+LRR-like protein OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d014687 PE=3 SV=1	ZEAMMB73_ZM00001D014687	861
A0A1D6GVB7	NLRGroup	protein	tr A0A1D6GVB7 A0A1D6GVB7_MAIZE L-zip+NBS+LRR-like protein OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d014687 PE=3 SV=1	ZEAMMB73_ZM00001D014687	1316
A0A1D6GVC2	NLRGroup	protein	tr A0A1D6GVC2 A0A1D6GVC2_MAIZE L-zip+NBS+LRR-like protein OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d014687 PE=4 SV=1	ZEAMMB73_ZM00001D014687	841
A0A1D6J3B0	NLRGroup	protein	tr A0A1D6J3B0 A0A1D6J3B0_MAIZE NBS-LRR class disease resistance protein OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d024979 PE=3 SV=1	ZEAMMB73_ZM00001D024979	975
A0A1D6JWR1	NLRGroup	RPS5	tr A0A1D6JWR1 A0A1D6JWR1_MAIZE Disease resistance protein RPS5 OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d028484 PE=4 SV=1	ZEAMMB73_ZM00001D028484	555
A0A1D6KET2	NLRGroup	protein	tr A0A1D6KET2 A0A1D6KET2_MAIZE Putative disease resistance protein OS=Zea mays OX=4577 GN=LOC103640507 PE=3 SV=1	LOC103640507	871
A0A1D6KKU6	NLRGroup	PIC15	tr A0A1D6KKU6 A0A1D6KKU6_MAIZE Disease resistance gene analog PIC15 OS=Zea mays OX=4577 GN=LOC118473134 PE=3 SV=1	LOC118473134	1195
A0A1D6LA89	NLRGroup	protein	tr A0A1D6LA89 A0A1D6LA89_MAIZE Disease resistance protein At4g27190-like leucine-rich repeats domain-containing protein OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d034711 PE=4 SV=1	ZEAMMB73_ZM00001D034711	2060
A0A1D6LA94	NLRGroup	protein	tr A0A1D6LA94 A0A1D6LA94_MAIZE Disease resistance protein At4g27190-like leucine-rich repeats domain-containing protein OS=Zea mays OX=4577 GN=LOC103644279 PE=1 SV=1	LOC103644279	1057
A0A1D6LEL6	NLRGroup	4	tr A0A1D6LEL6 A0A1D6LEL6_MAIZE Disease resistance RPP13-like protein 4 OS=Zea mays OX=4577 GN=LOC103630851 PE=1 SV=1	LOC103630851	1265
A0A1D6MVK0	NLRGroup	protein	tr A0A1D6MVK0 A0A1D6MVK0_MAIZE Putative disease resistance protein OS=Zea mays OX=4577 GN=LOC100272591 PE=3 SV=1	LOC100272591	858
A0A1D6MVK1	NLRGroup	protein	tr A0A1D6MVK1 A0A1D6MVK1_MAIZE Putative disease resistance protein OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d041343 PE=4 SV=1	ZEAMMB73_ZM00001D041343	576
A0A1D6MVK2	NLRGroup	protein	tr A0A1D6MVK2 A0A1D6MVK2_MAIZE Putative disease resistance protein OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d041343 PE=4 SV=1	ZEAMMB73_ZM00001D041343	214
A0A1D6MVM1	NLRGroup	protein-like	tr A0A1D6MVM1 A0A1D6MVM1_MAIZE NBS-LRR disease resistance protein-like OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d041358 PE=4 SV=1	ZEAMMB73_ZM00001D041358	435
A0A1D6PNC6	NLRGroup	expressed	tr A0A1D6PNC6 A0A1D6PNC6_MAIZE NB-ARC domain containing protein expressed OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d048665 PE=3 SV=1	ZEAMMB73_ZM00001D048665	752
A0A1D6QGV2	NLRGroup	protein	tr A0A1D6QGV2 A0A1D6QGV2_MAIZE Os01g0536600-like protein OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d052394 PE=3 SV=1	ZEAMMB73_ZM00001D052394	363
A0A317Y752	NLRGroup	protein	tr A0A317Y752 A0A317Y752_MAIZE Uncharacterized protein OS=Zea mays OX=4577 GN=Zm00014a_019849 PE=4 SV=1	ZM00014a_019849	889

A0A317YCC8	NLRGroup	protein	tr A0A317YCC8 A0A317YCC8_MAIZE Putative disease resistance protein OS=Zea mays OX=4577 GN=At5g63020 PE=4 SV=1	AT5G63020	1060
A0A317YHS8	NLRGroup	protein	tr A0A317YHS8 A0A317YHS8_MAIZE Putative disease resistance protein OS=Zea mays OX=4577 GN=At4g33300_1 PE=3 SV=1	AT4G33300_1	869
A0A3L6ECN4	NLRGroup	RGA3	tr A0A3L6ECN4 A0A3L6ECN4_MAIZE Putative disease resistance protein RGA3 OS=Zea mays OX=4577 GN=RGA3_18 PE=4 SV=1	RGA3_18	1265
A0A3L6EW03	NLRGroup	RGA4	tr A0A3L6EW03 A0A3L6EW03_MAIZE Putative disease resistance protein RGA4 OS=Zea mays OX=4577 GN=Zm00014a_013052 PE=3 SV=1	ZM00014A_013052	1024
A0A3L6FA16	NLRGroup	RGA4	tr A0A3L6FA16 A0A3L6FA16_MAIZE Putative disease resistance protein RGA4 OS=Zea mays OX=4577 GN=RGA4_0 PE=3 SV=1	RGA4_0	957
A0A3L6FKE5	NLRGroup	protein	tr A0A3L6FKE5 A0A3L6FKE5_MAIZE Putative disease resistance protein OS=Zea mays OX=4577 GN=Zm00014a_020801 PE=3 SV=1	ZM00014A_020801	856
A0A3L6FPH8	NLRGroup	RPS2	tr A0A3L6FPH8 A0A3L6FPH8_MAIZE Disease resistance protein RPS2 OS=Zea mays OX=4577 GN=RPS2_2 PE=3 SV=1	RPS2_2	908
A0A3L6FR56	NLRGroup	protein	tr A0A3L6FR56 A0A3L6FR56_MAIZE Disease resistance protein At4g27190-like leucine-rich repeats domain-containing protein OS=Zea mays OX=4577 GN=Zm00014a_031295 PE=4 SV=1	ZM00014A_031295	1046
A0A3L6FRU1	NLRGroup	RPS2	tr A0A3L6FRU1 A0A3L6FRU1_MAIZE Disease resistance protein RPS2 OS=Zea mays OX=4577 GN=RPS2_1 PE=4 SV=1	RPS2_1	996
A0A3L6FT12	NLRGroup	RGA4	tr A0A3L6FT12 A0A3L6FT12_MAIZE Putative disease resistance protein RGA4 OS=Zea mays OX=4577 GN=RGA4_2 PE=3 SV=1	RGA4_2	1293
A0A3L6G194	NLRGroup	RPS2	tr A0A3L6G194 A0A3L6G194_MAIZE Disease resistance protein RPS2 OS=Zea mays OX=4577 GN=RPS2_3 PE=4 SV=1	RPS2_3	1046
A0A3L6G292	NLRGroup	protein	tr A0A3L6G292 A0A3L6G292_MAIZE Disease resistance protein At4g27190-like leucine-rich repeats domain-containing protein OS=Zea mays OX=4577 GN=Zm00014a_017787 PE=4 SV=1	ZM00014A_017787	1103
A0A3L6GBG4	NLRGroup	RGA4	tr A0A3L6GBG4 A0A3L6GBG4_MAIZE Putative disease resistance protein RGA4 OS=Zea mays OX=4577 GN=RGA4_1 PE=3 SV=1	RGA4_1	1319
A0A6H1X474	NLRGroup	Rp1-D21-CM2	tr A0A6H1X474 A0A6H1X474_MAIZE Rp1-D21-CM2 OS=Zea mays OX=4577 PE=2 SV=2	OTHER	541
A0A6H1X477	NLRGroup	Rp1-D21-4	tr A0A6H1X477 A0A6H1X477_MAIZE Rp1-D21-4 OS=Zea mays OX=4577 PE=2 SV=1	OTHER	1290
A0A6H1X484	NLRGroup	Rp1-D21-CM3_4	tr A0A6H1X484 A0A6H1X484_MAIZE Rp1-D21-CM3_4 OS=Zea mays OX=4577 PE=2 SV=2	OTHER	1290
A0A6H1X4A5	NLRGroup	Rp1-D21-CM1	tr A0A6H1X4A5 A0A6H1X4A5_MAIZE Rp1-D21-CM1 OS=Zea mays OX=4577 PE=2 SV=1	OTHER	1290
A0A804MHV0	NLRGroup	protein	tr A0A804MHV0 A0A804MHV0_MAIZE Disease resistance protein At4g27190-like leucine-rich repeats domain-containing protein OS=Zea mays OX=4577 GN=LOC100381927 PE=4 SV=1	LOC100381927	1094
A0A804MHV2	NLRGroup	protein	tr A0A804MHV2 A0A804MHV2_MAIZE NB-ARC domain-containing protein OS=Zea mays OX=4577 GN=LOC100381927 PE=4 SV=1	LOC100381927	823
A0A804MHV3	NLRGroup	protein	tr A0A804MHV3 A0A804MHV3_MAIZE Disease resistance protein At4g27190-like leucine-rich repeats domain-containing protein OS=Zea mays OX=4577 GN=LOC100381927 PE=4 SV=1	LOC100381927	1053

A0A804MVA6	NLRGroup	protein	tr A0A804MVA6 A0A804MVA6_MAIZE Disease resistance protein At4g27190-like leucine-rich repeats domain-containing protein OS=Zea mays OX=4577 PE=4 SV=1	OTHER	944
A0A804N4R5	NLRGroup	protein	tr A0A804N4R5 A0A804N4R5_MAIZE Disease resistance protein OS=Zea mays OX=4577 GN=LOC100272591 PE=4 SV=1	LOC100272591	763
A0A8J8XGZ4	NLRGroup	RGA3	tr A0A8J8XGZ4 A0A8J8XGZ4_MAIZE Putative disease resistance protein RGA3 OS=Zea mays OX=4577 GN=RGA3_8 PE=3 SV=1	RGA3_8	1195
A0A8J8YSZ8	NLRGroup	1	tr A0A8J8YSZ8 A0A8J8YSZ8_MAIZE Putative disease resistance RPP13-like protein 1 OS=Zea mays OX=4577 GN=RPPL1_7 PE=3 SV=1	RPPL1_7	1066
B4FCQ8	NLRGroup	protein	tr B4FCQ8 B4FCQ8_MAIZE Uncharacterized protein OS=Zea mays OX=4577 PE=2 SV=1	OTHER	152
B4FK02	NLRGroup	protein	tr B4FK02 B4FK02_MAIZE Disease resistance protein At4g27190-like leucine-rich repeats domain-containing protein OS=Zea mays OX=4577 PE=2 SV=1	OTHER	246
B4FPG7	NLRGroup	protein	tr B4FPG7 B4FPG7_MAIZE Disease resistance protein OS=Zea mays OX=4577 PE=2 SV=1	OTHER	294
B6STS5	NLRGroup	RGA4	tr B6STS5 B6STS5_MAIZE Disease resistance protein RGA4 OS=Zea mays OX=4577 GN=LOC100281260 PE=2 SV=1	LOC100281260	411
C0P2V8	NLRGroup	protein	tr C0P2V8 C0P2V8_MAIZE Disease resistance protein At4g27190-like leucine-rich repeats domain-containing protein OS=Zea mays OX=4577 PE=2 SV=1	OTHER	774
C0PKZ1	NLRGroup	protein	tr C0PKZ1 C0PKZ1_MAIZE Disease resistance protein OS=Zea mays OX=4577 PE=2 SV=1	OTHER	430
K7TIA6	NLRGroup	protein	tr K7TIA6 K7TIA6_MAIZE Os01g0112866-like protein OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d023311 PE=4 SV=1	ZEAMMB73_ZM00001D023311	438
K7U5J1	NLRGroup	protein	tr K7U5J1 K7U5J1_MAIZE L-zip+NBS+LRR-like protein OS=Zea mays OX=4577 GN=LOC100275648 PE=1 SV=1	LOC100275648	1693
Q52QI0	NLRGroup	protein	tr Q52QI0 Q52QI0_MAIZE NBS-LRR type disease resistance protein OS=Zea mays OX=4577 GN=MRPR1 PE=2 SV=1	MRPR1	909
Q6PW75	PLOStarget	rp3-1	tr Q6PW75 Q6PW75_MAIZE Rust resistance protein rp3-1 OS=Zea mays OX=4577 GN=rp3-1 PE=3 SV=1	RP3-1	1258
Q9AT73	PLOStarget	protein	tr Q9AT73 Q9AT73_MAIZE Rust resistance Rp1-D-like protein OS=Zea mays OX=4577 PE=3 SV=1	OTHER	1278
Q9SWT9	NLRGroup	homolog	tr Q9SWT9 Q9SWT9_MAIZE Rust resistance protein RP1-D homolog OS=Zea mays OX=4577 GN=rp1-Cin4 PE=3 SV=1	RP1-CIN4	487
Q9SWU0	NLRGroup	protein	tr Q9SWU0 Q9SWU0_MAIZE Rust resistance protein OS=Zea mays OX=4577 GN=Rp1-D PE=3 SV=1	RP1-D	1292
W0NT67	NLRGroup	protein	tr W0NT67 W0NT67_MAIZE NBS-LRR disease resistance protein OS=Zea mays OX=4577 PE=2 SV=1	OTHER	1051
Q9S7Q4	ValidationTarget	Gpa2	tr Q9S7Q4 Q9S7Q4_SOLTU Disease resistance protein Gpa2 OS=Solanum tuberosum OX=4113 GN=GPA2 PE=3 SV=1	GPA2	912
Q9XGF5	ValidationTarget	protein	tr Q9XGF5 Q9XGF5_SOLTU Rx protein OS=Solanum tuberosum OX=4113 GN=rx PE=1 SV=1	RX	937
E9KPB5	ValidationTarget	Pikp-1	tr E9KPB5 E9KPB5_ORYSJ Resistance protein Pikp-1 OS=Oryza sativa subsp. japonica OX=39947 GN=Pikp-1 PE=1 SV=1	PIKP-1	1142
Q01IL6	ValidationTarget	protein	tr Q01IL6 Q01IL6_ORYSA OSIGBa0128P10.9 protein OS=Oryza sativa OX=4530 GN=OSIGBa0150F01.4 PE=1 SV=1	OSIGBA0150F01	122
A0A1D6F5N5	LLRtarget	BAK6	sp A0A1D6F5N5 LRR5_MAIZE Disease resistance protein BAK6 OS=Zea mays OX=4577 GN=BAK6 PE=1 SV=1	BAK6	247

Q940E8	LLRtarget	EAR2	sp Q940E8 FEA2_MAIZE Leucine-rich repeat receptor-like protein FASCIATED EAR2 OS=Zea mays OX=4577 GN=FEA2 PE=1 SV=1	FEA2	613
Q5GAP9	LLRtarget	protein	tr Q5GAP9 Q5GAP9_MAIZE Leucine-rich repeat transmembrane protein kinase 1-like protein OS=Zea mays OX=4577 GN=G9009 PE=4 SV=1	G9009	693
P0DL10	LLRtarget	DWARF1	sp P0DL10 TD1_MAIZE Leucine-rich repeat receptor-like kinase protein THICK TASSEL DWARF1 OS=Zea mays OX=4577 GN=TD1 PE=2 SV=1	TD1	996

Table S2. Uniprot protein information arranged by cluster.

Cluster	UniProt	Name	Header
0	A0A1D6EE37	ZEAMMB73_ZM00001D004127	tr A0A1D6EE37 A0A1D6EE37_MAIZE Disease resistance protein At4g27190-like leucine-rich repeats domain-containing protein OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d004127 PE=4 SV=1
0	A0A1D6F6R4	ZEAMMB73_ZM00001D007491	tr A0A1D6F6R4 A0A1D6F6R4_MAIZE Disease resistance protein RPS2 OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d007491 PE=4 SV=1
0	A0A1D6F6R7	ZEAMMB73_ZM00001D007495	tr A0A1D6F6R7 A0A1D6F6R7_MAIZE Disease resistance protein RPS2 OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d007495 PE=4 SV=1
0	A0A1D6F7M4	LOC100216844	tr A0A1D6F7M4 A0A1D6F7M4_MAIZE Disease resistance protein RPS2 OS=Zea mays OX=4577 GN=LOC100216844 PE=4 SV=1
0	A0A1D6LA89	ZEAMMB73_ZM00001D034711	tr A0A1D6LA89 A0A1D6LA89_MAIZE Disease resistance protein At4g27190-like leucine-rich repeats domain-containing protein OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d034711 PE=4 SV=1
0	A0A1D6LA94	LOC103644279	tr A0A1D6LA94 A0A1D6LA94_MAIZE Disease resistance protein At4g27190-like leucine-rich repeats domain-containing protein OS=Zea mays OX=4577 GN=LOC103644279 PE=1 SV=1
0	A0A1D6PNC6	ZEAMMB73_ZM00001D048665	tr A0A1D6PNC6 A0A1D6PNC6_MAIZE NB-ARC domain containing protein expressed OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d048665 PE=3 SV=1
0	A0A317Y752	ZM00014A_019849	tr A0A317Y752 A0A317Y752_MAIZE Uncharacterized protein OS=Zea mays OX=4577 GN=Zm00014a_019849 PE=4 SV=1
0	A0A317YCC8	AT5G63020	tr A0A317YCC8 A0A317YCC8_MAIZE Putative disease resistance protein OS=Zea mays OX=4577 GN=At5g63020 PE=4 SV=1
0	A0A3L6FR56	ZM00014A_031295	tr A0A3L6FR56 A0A3L6FR56_MAIZE Disease resistance protein At4g27190-like leucine-rich repeats domain-containing protein OS=Zea mays OX=4577 GN=Zm00014a_031295 PE=4 SV=1
0	A0A3L6FRU1	RPS2_1	tr A0A3L6FRU1 A0A3L6FRU1_MAIZE Disease resistance protein RPS2 OS=Zea mays OX=4577 GN=RPS2_1 PE=4 SV=1
0	A0A3L6G194	RPS2_3	tr A0A3L6G194 A0A3L6G194_MAIZE Disease resistance protein RPS2 OS=Zea mays OX=4577 GN=RPS2_3 PE=4 SV=1
0	A0A3L6G292	ZM00014A_017787	tr A0A3L6G292 A0A3L6G292_MAIZE Disease resistance protein At4g27190-like leucine-rich repeats domain-containing protein OS=Zea mays OX=4577 GN=Zm00014a_017787 PE=4 SV=1
0	A0A804MHV0	LOC100381927	tr A0A804MHV0 A0A804MHV0_MAIZE Disease resistance protein At4g27190-like leucine-rich repeats domain-containing protein OS=Zea mays OX=4577 GN=LOC100381927 PE=4 SV=1
0	A0A804MHV2	LOC100381927	tr A0A804MHV2 A0A804MHV2_MAIZE NB-ARC domain-containing protein OS=Zea mays OX=4577 GN=LOC100381927 PE=4 SV=1
0	A0A804MHV3	LOC100381927	tr A0A804MHV3 A0A804MHV3_MAIZE Disease resistance protein At4g27190-like leucine-rich repeats domain-containing protein OS=Zea mays OX=4577 GN=LOC100381927 PE=4 SV=1
0	A0A804MVA6	OTHER	tr A0A804MVA6 A0A804MVA6_MAIZE Disease resistance protein At4g27190-like leucine-rich repeats domain-containing protein OS=Zea mays OX=4577 PE=4 SV=1
0	B4FK02	OTHER	tr B4FK02 B4FK02_MAIZE Disease resistance protein At4g27190-like leucine-rich repeats domain-containing protein OS=Zea mays OX=4577 PE=2 SV=1
0	B4FPG7	OTHER	tr B4FPG7 B4FPG7_MAIZE Disease resistance protein OS=Zea mays OX=4577 PE=2 SV=1
0	C0P2V8	OTHER	tr C0P2V8 C0P2V8_MAIZE Disease resistance protein At4g27190-like leucine-rich repeats domain-containing protein OS=Zea mays OX=4577 PE=2 SV=1
0	C0PKZ1	OTHER	tr C0PKZ1 C0PKZ1_MAIZE Disease resistance protein OS=Zea mays OX=4577 PE=2 SV=1

0	K7TIA6	ZEAMMB73_ZM00001D023311	tr K7TIA6 K7TIA6_MAIZE Os01g0112866-like protein OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d023311 PE=4 SV=1
1	A0A1D6E657	LOC103646229	tr A0A1D6E657 A0A1D6E657_MAIZE Disease resistance gene analog PIC17 OS=Zea mays OX=4577 GN=LOC103646229 PE=1 SV=1
1	A0A1D6F078	LOC103647804	tr A0A1D6F078 A0A1D6F078_MAIZE Disease resistance RPP13-like protein 4 OS=Zea mays OX=4577 GN=LOC103647804 PE=3 SV=1
1	A0A1D6GVA7	ZEAMMB73_ZM00001D014687	tr A0A1D6GVA7 A0A1D6GVA7_MAIZE L-zip+NBS+LRR-like protein OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d014687 PE=3 SV=1
1	A0A1D6GVA8	LOC103626411	tr A0A1D6GVA8 A0A1D6GVA8_MAIZE L-zip+NBS+LRR-like protein OS=Zea mays OX=4577 GN=LOC103626411 PE=3 SV=1
1	A0A1D6GVB0	ZEAMMB73_ZM00001D014687	tr A0A1D6GVB0 A0A1D6GVB0_MAIZE L-zip+NBS+LRR-like protein OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d014687 PE=3 SV=1
1	A0A1D6GVB7	ZEAMMB73_ZM00001D014687	tr A0A1D6GVB7 A0A1D6GVB7_MAIZE L-zip+NBS+LRR-like protein OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d014687 PE=3 SV=1
1	A0A1D6GVC2	ZEAMMB73_ZM00001D014687	tr A0A1D6GVC2 A0A1D6GVC2_MAIZE L-zip+NBS+LRR-like protein OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d014687 PE=4 SV=1
1	A0A1D6IBJ7	LOC103633174	tr A0A1D6IBJ7 A0A1D6IBJ7_MAIZE Disease resistance RPP13-like protein 4 OS=Zea mays OX=4577 GN=LOC103633174 PE=3 SV=1
1	A0A1D6J3B0	ZEAMMB73_ZM00001D024979	tr A0A1D6J3B0 A0A1D6J3B0_MAIZE NBS-LRR class disease resistance protein OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d024979 PE=3 SV=1
1	A0A1D6JWR1	ZEAMMB73_ZM00001D028484	tr A0A1D6JWR1 A0A1D6JWR1_MAIZE Disease resistance protein RPS5 OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d028484 PE=4 SV=1
1	A0A1D6KET2	LOC103640507	tr A0A1D6KET2 A0A1D6KET2_MAIZE Putative disease resistance protein OS=Zea mays OX=4577 GN=LOC103640507 PE=3 SV=1
1	A0A1D6KKU6	LOC118473134	tr A0A1D6KKU6 A0A1D6KKU6_MAIZE Disease resistance gene analog PIC15 OS=Zea mays OX=4577 GN=LOC118473134 PE=3 SV=1
1	A0A1D6LEL6	LOC103630851	tr A0A1D6LEL6 A0A1D6LEL6_MAIZE Disease resistance RPP13-like protein 4 OS=Zea mays OX=4577 GN=LOC103630851 PE=1 SV=1
1	A0A1D6MVK0	LOC100272591	tr A0A1D6MVK0 A0A1D6MVK0_MAIZE Putative disease resistance protein OS=Zea mays OX=4577 GN=LOC100272591 PE=3 SV=1
1	A0A1D6MVK1	ZEAMMB73_ZM00001D041343	tr A0A1D6MVK1 A0A1D6MVK1_MAIZE Putative disease resistance protein OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d041343 PE=4 SV=1
1	A0A1D6MVK2	ZEAMMB73_ZM00001D041343	tr A0A1D6MVK2 A0A1D6MVK2_MAIZE Putative disease resistance protein OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d041343 PE=4 SV=1
1	A0A1D6MVM1	ZEAMMB73_ZM00001D041358	tr A0A1D6MVM1 A0A1D6MVM1_MAIZE NBS-LRR disease resistance protein-like OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d041358 PE=4 SV=1
1	A0A1D6N9M6	LOC103651126	tr A0A1D6N9M6 A0A1D6N9M6_MAIZE Disease resistance gene analog PIC21 OS=Zea mays OX=4577 GN=LOC103651126 PE=1 SV=1
1	A0A1D6QGV2	ZEAMMB73_ZM00001D052394	tr A0A1D6QGV2 A0A1D6QGV2_MAIZE Os01g0536600-like protein OS=Zea mays OX=4577 GN=ZEAMMB73_Zm00001d052394 PE=3 SV=1
1	A0A317Y0I6	RPS2_4	tr A0A317Y0I6 A0A317Y0I6_MAIZE Disease resistance protein RPS2 OS=Zea mays OX=4577 GN=RPS2_4 PE=3 SV=1
1	A0A317YA01	RGA4_3	tr A0A317YA01 A0A317YA01_MAIZE Putative disease resistance protein RGA4 (Fragment) OS=Zea mays OX=4577 GN=RGA4_3 PE=3 SV=1
1	A0A317YHS8	AT4G33300_1	tr A0A317YHS8 A0A317YHS8_MAIZE Putative disease resistance protein OS=Zea mays OX=4577 GN=At4g33300_1 PE=3 SV=1
1	A0A3L6DXL4	RGA3_10	tr A0A3L6DXL4 A0A3L6DXL4_MAIZE Putative disease resistance protein RGA3 OS=Zea mays OX=4577 GN=RGA3_10 PE=3 SV=1
1	A0A3L6ECN4	RGA3_18	tr A0A3L6ECN4 A0A3L6ECN4_MAIZE Putative disease resistance protein RGA3 OS=Zea mays OX=4577 GN=RGA3_18 PE=4 SV=1

1	A0A3L6EW03	ZM00014A_013052	tr A0A3L6EW03 A0A3L6EW03_MAIZE Putative disease resistance protein RGA4 OS=Zea mays OX=4577 GN=Zm00014a_013052 PE=3 SV=1
1	A0A3L6FA16	RGA4_0	tr A0A3L6FA16 A0A3L6FA16_MAIZE Putative disease resistance protein RGA4 OS=Zea mays OX=4577 GN=RGA4_0 PE=3 SV=1
1	A0A3L6FKE5	ZM00014A_020801	tr A0A3L6FKE5 A0A3L6FKE5_MAIZE Putative disease resistance protein OS=Zea mays OX=4577 GN=Zm00014a_020801 PE=3 SV=1
1	A0A3L6FPH8	RPS2_2	tr A0A3L6FPH8 A0A3L6FPH8_MAIZE Disease resistance protein RPS2 OS=Zea mays OX=4577 GN=RPS2_2 PE=3 SV=1
1	A0A3L6FR37	RPS2_0	tr A0A3L6FR37 A0A3L6FR37_MAIZE Disease resistance protein RPS2 OS=Zea mays OX=4577 GN=RPS2_0 PE=3 SV=1
1	A0A3L6FT12	RGA4_2	tr A0A3L6FT12 A0A3L6FT12_MAIZE Putative disease resistance protein RGA4 OS=Zea mays OX=4577 GN=RGA4_2 PE=3 SV=1
1	A0A3L6GBG4	RGA4_1	tr A0A3L6GBG4 A0A3L6GBG4_MAIZE Putative disease resistance protein RGA4 OS=Zea mays OX=4577 GN=RGA4_1 PE=3 SV=1
1	A0A6H1X474	OTHER	tr A0A6H1X474 A0A6H1X474_MAIZE Rp1-D21-CM2 OS=Zea mays OX=4577 PE=2 SV=2
1	A0A6H1X477	OTHER	tr A0A6H1X477 A0A6H1X477_MAIZE Rp1-D21-4 OS=Zea mays OX=4577 PE=2 SV=1
1	A0A6H1X484	OTHER	tr A0A6H1X484 A0A6H1X484_MAIZE Rp1-D21-CM3_4 OS=Zea mays OX=4577 PE=2 SV=2
1	A0A6H1X4A5	OTHER	tr A0A6H1X4A5 A0A6H1X4A5_MAIZE Rp1-D21-CM1 OS=Zea mays OX=4577 PE=2 SV=1
1	A0A804LH89	LOC103633703	tr A0A804LH89 A0A804LH89_MAIZE Disease resistance protein RPS2 OS=Zea mays OX=4577 GN=LOC103633703 PE=1 SV=1
1	A0A804MDK0	LOC103646229	tr A0A804MDK0 A0A804MDK0_MAIZE AAA+ ATPase domain-containing protein OS=Zea mays OX=4577 GN=LOC103646229 PE=1 SV=1
1	A0A804N4R5	LOC100272591	tr A0A804N4R5 A0A804N4R5_MAIZE Disease resistance protein OS=Zea mays OX=4577 GN=LOC100272591 PE=4 SV=1
1	A0A8J8XGZ4	RGA3_8	tr A0A8J8XGZ4 A0A8J8XGZ4_MAIZE Putative disease resistance protein RGA3 OS=Zea mays OX=4577 GN=RGA3_8 PE=3 SV=1
1	A0A8J8YSZ8	RPPL1_7	tr A0A8J8YSZ8 A0A8J8YSZ8_MAIZE Putative disease resistance RPP13-like protein 1 OS=Zea mays OX=4577 GN=RPPL1_7 PE=3 SV=1
1	B4FCQ8	OTHER	tr B4FCQ8 B4FCQ8_MAIZE Uncharacterized protein OS=Zea mays OX=4577 PE=2 SV=1
1	B6STS5	LOC100281260	tr B6STS5 B6STS5_MAIZE Disease resistance protein RGA4 OS=Zea mays OX=4577 GN=LOC100281260 PE=2 SV=1
1	K7U5J1	LOC100275648	tr K7U5J1 K7U5J1_MAIZE L-zip+NBS+LRR-like protein OS=Zea mays OX=4577 GN=LOC100275648 PE=1 SV=1
1	K7UCK5	LOC606485	tr K7UCK5 K7UCK5_MAIZE NBS-LRR type disease resistance protein OS=Zea mays OX=4577 GN=LOC606485 PE=3 SV=1
1	Q52QI0	MRPR1	tr Q52QI0 Q52QI0_MAIZE NBS-LRR type disease resistance protein OS=Zea mays OX=4577 GN=MRPR1 PE=2 SV=1
1	Q5BMB3	RXO1	tr Q5BMB3 Q5BMB3_MAIZE RXO1 disease resistance protein OS=Zea mays OX=4577 GN=rxo1 PE=1 SV=1
1	Q6PW75	RP3-1	tr Q6PW75 Q6PW75_MAIZE Rust resistance protein rp3-1 OS=Zea mays OX=4577 GN=rp3-1 PE=3 SV=1
1	Q9AT73	OTHER	tr Q9AT73 Q9AT73_MAIZE Rust resistance Rp1-D-like protein OS=Zea mays OX=4577 PE=3 SV=1
1	Q9SWT9	RP1-CIN4	tr Q9SWT9 Q9SWT9_MAIZE Rust resistance protein RP1-D homolog OS=Zea mays OX=4577 GN=rp1-Cin4 PE=3 SV=1
1	Q9SWU0	RP1-D	tr Q9SWU0 Q9SWU0_MAIZE Rust resistance protein OS=Zea mays OX=4577 GN=Rp1-D PE=3 SV=1
1	W0NT67	OTHER	tr W0NT67 W0NT67_MAIZE NBS-LRR disease resistance protein OS=Zea mays OX=4577 PE=2 SV=1
2	A0A172Q4R0	CCoAOMT2	tr A0A172Q4R0 A0A172Q4R0_MAIZE CCoAOMT2 OS=Zea mays OX=4577 GN=CCoAOMT2 PE=2 SV=1
2	A0A172QB57	CCoAOMT2	tr A0A172QB57 A0A172QB57_MAIZE CCoAOMT2 OS=Zea mays OX=4577 GN=CCoAOMT2 PE=2 SV=1
2	A0A172QB77	OTHER	tr A0A172QB77 A0A172QB77_MAIZE CCoAOMT2 OS=Zea mays OX=4577 PE=2 SV=1