

Table S1: Genotyping details, SNP locations and impacts (based on galGal5)

Gene	SNP	Chr:bp	Location ¹	nt change	Codon Change	Amino Acid
AP2A2	00001	5:14,504,585	5' upstream	T>C	-	-
	i1-02199	5:14,502,020	Intron 1	G>C	-	-
	i1-05799	5:14,498,420	Intron 1	G>A	-	-
	i1-10304	5:14,493,915	Intron 1	C>G	-	-
	i2-14650	5:14,489,569	Intron 2	C>T	-	-
	i2-18015	5:14,486,204	Intron 2	T>A	-	-
	i3-21570	5:14,482,649	Intron 3	C>A	-	-
	i6-25342	5:14,478,877	Intron 6	C>T	-	-
	i9-28615	5:14,475,604	Intron 9	C>T	-	-
	1434	5:14,474,099	Exon 11	A>C	TAT>TCT	Y442S
	i13-31160	5:14,473,059	Intron 13	A>G	-	-
	i16-34011	5:14,470,208	Intron 16	G>A	-	-
	i20-37517	5:14,466,702	Intron 20	C>T	-	-
	i23-39719	5:14,464,500	Intron 23	C>T	-	-
	43919	5:14,460,300	3' downstream	T>C	-	-
HSP70	0258	5:52,785,824	Exon 1	G>A	TCG>TCA	S86S
	0909	5:52,785,173	Exon 1	C>A	GCC>GCA	A303A
	0985	5:52,785,097	Exon 1	C>T	CTT>TTT	L329F
	1044	5:52,785,038	Exon 1	G>A	AAG>AAA	K348K
	1622	5:52,784,460	Exon 1	C>A	GCC>GAC	A541D
HSPA8	i1-027	24:3,069,453	Intron 1	C>A	-	-
	0391	24:3,070,254	Exon 2	G>A	AAG>AAA	K25K
	1072	24:3,071,587	Exon 5	C>T	GAC>GAT	D252D
	1471	24:3,072,303	Exon 6	T>C	TCT>TCC	S385S
	1831	24:3,072,974	Exon 7	T>C	AAT>AAC	N505N
	3260	24:3,075,200	3' downstream	C>T	-	-
HSPB1	133	19:4,255,590	Exon 1	G>C	TGG>TGC	W42C
	280	19:4,255,443	Exon 1	C>T	GCC>GCT	A91A
	i1-1005	19:4,254,450	Intron 1	G>A	-	-
	459	19:4,253,765	Exon 3	T>A	GTG>GAG	V164E
IFI27L2	559	19:4,253,704	Exon 3	C>T	GTC>GTT	V184V
	161	23:4,295,436	Exon 2	G>T	GCC>TCC	A35S
	219	23:4,295,494	Exon 2	A>G	AAC>AGC	N54S
	291	23:4,295,816	Exon 3	T>G	GTT>GGT	V78G
	299	23:4,295,824	Exon 3	G>C	GTC>CTC	V81L
	312	23:4,295,837	Exon 3	C>T	TCC>TTC	S85F
	324	23:4,295,849	Exon 3	C>T	CCG>CTG	P89L
	326	23:4,295,851	Exon 3	G>C	GTC>CTC	V90L
IFRD1	357	23:4,295,882	Exon 3	A>C	TAA>TCA	*100S
	0319	1:26,863,605	Exon 2	G>A	AGT>AAT	S21N
	0390	1:26,863,534	Exon 2	C>G	CCC>GCC	P45A
IRIL1	1038	1:26,859,831	Exon 8	G>C	GAT>CAT	D261H
	202-0149	1:133,233,629	Exon 2	G>A	GTG>ATG	V18M
	202-0213	1:133,235,394	Exon 3	A>T	GAT>GTT	D39V
	202-0548	1:133,236,107	Exon 5	C>A	CTA>ATA	L151I
	202-0551	1:133,236,110	Exon 5	C>G	CAG>GAG	Q152E
	202-0572	1:133,236,131	Exon 5	T>C	TAT>CAT	Y159H
	202-0869	1:133,239,869	Exon 7	G>A	GAT>AAT	D258N
202-1056	1:133,241,608	Exon 9	C>T	CCT>CTT	P320L	
SLC5A1	0484	15:8,778,833	Exon 6	T>C	TTG>CTG	L162L

	0906	15:8,776,145	Exon 9	C>T	TGC>TGT	C302C
	I10-6	15:8,775,513	Intron 10	G>A	-	-
	1464	15:8,772,392	Exon 13	G>T	GAG>GAT	E488D
	1505	15:8,772,351	Exon 13	G>A	TGT>TAT	C502Y
	2995	15:8,769,777	Exon 15 (UTR)	C>T	-	-
	3190	15:8,769,582	Exon 15 (UTR)	A>G	-	-
	3702	15:8,769,070	Exon 15 (UTR)	T>C	-	-
TLR3	0050	4:60,925,710	Intron 1	T>C	-	-
	0095	4:60,925,755	Intron 1	G>A	-	-
	0203	4:60,925,863	Exon 2	A>T	GAT>GTT	D19V
	0274	4:60,925,934	Exon 2	A>C	AAA>CAA	K43Q
	0389	4:60,926,049	Exon 2	A>G	AAT>AGT	N81S
	0538	4:60,927,055	Exon 3	A>G	AGC>GGC	S131G
	0574	4:60,927,091	Exon 3	A/-	AAA>	frameshift
	0719	4:60,928,079	Exon 4	A>C	AAC>CAC	N174H
	0892	4:60,928,252	Intron 5	T>G	-	-
	1000	4:60,928,360	Exon 6	A>T	ACT>TCT	T201S
	1197	4:60,928,557	Exon 6	G>C	AGG>AGC	R266S
	1247	4:60,928,607	Exon 6	A>G	GAG>GGG	E283G
	1538	4:60,928,898	Exon 6	G>A	AGG>AAG	R380K
	1781	4:60,929,141	Exon 6	C>T	GCG>GTG	A461V
	1795	4:60,929,155	Exon 6	G>C	GAC>CAC	D466H
	1936	4:60,929,296	Exon 6	G>T	GCT>TCT	A513S
	2108	4:60,929,468	Exon 6	C>T	GCT>GTT	A570V
	2299	4:60,929,659	Exon 6	A>T	ACT>TCT	T634S
	2356	4:60,929,716	Exon 6	G>A	GAA>AAA	E653K
	2397	4:60,929,757	Exon 6	A>G	ATA>ATG	I666M
	2545	4:60,930,529	Exon 7	G>A	GAT>AAT	D716N
TLR7	0417	1:122,859,432	Exon 2	C>T	CGT>TGT	R030C
	0666	1:122,859,183	Exon 2	G>A	GTC>ATC	V113I
	0708	1:122,859,141	Exon 2	A>T	ACA>TCA	T127S
	0781	1:122,859,068	Exon 2	G>A	CGT>CAT	R151H
	3169	1:122,856,680	Exon 2	A>C	CAG>CCG	Q947P
TOLLIP	00001	5:14,041,383	5' upstream	G>A	-	-
	i-02190	5:14,044,248	Intron 1	A>G	-	-
	i-04007	5:14,046,065	Intron 1	T>C	-	-
	i-07212	5:14,049,270	Intron 1	C>T	-	-
	i2-09101	5:14,051,159	Intron 2	A>G	-	-
	0365	5:14,053,920	Exon 3	T>G	TAT>GAT	Y83D
	i3-12440	5:14,054,498	Intron 3	A>G	-	-
	i4-14397	5:14,056,455	Intron 4	A>G	-	-
	i5-17066	5:14,059,124	Intron 5	A>G	-	-
	i5-19496	5:14,061,554	Intron 5	A>C	-	-
	i5-22503	5:14,064,561	Intron 5	A>G	-	-
	0767	5:14,065,571	Exon 6	A>G	ACA>GCA	T217A
	0894	5:14,065,698	Exon 6	A>G	AAC>AGC	N259S
	25950	5:14,068,008	3' downstream	G>A	-	-

¹Location relative to gene elements

Table S2: AP2A2 SNPs and haplotype configurations

	SNPs														Concatenated Haplotypes	
	00001	i1-02199	i1-05799	i1-10304	i2-14650	i2-18015	i3-21570	i6-25342	i9-28615	1434	i13-31160	i16-34011	i20-37517	i23-39719		43919
H01	T	C	G	C	T	T	C	T	C	A	G	G	T	T	T	TCGCTTCTCAGGTTT
H02	T	C	G	C	T	A	C	T	T	A	A	A	C	T	T	TCGCTACTTAAACTT
H03	C	G	A	G	C	T	A	C	C	A	G	A	T	T	C	CGAGCTACCAGATTC
H04	C	G	A	G	C	T	C	C	C	A	A	G	C	T	T	CGAGCTCCCAAGCTT
H05	T	C	G	G	C	T	C	C	C	A	A	G	C	C	T	TCGGCTCCCAAGCCT
H06	C	G	A	G	C	T	C	T	C	A	G	G	T	T	T	CGAGCTCTCAGGTTT
H07	C	G	G	C	T	A	A	T	T	A	A	G	C	C	T	CGGCTAATTAAGCCT
H08	C	G	A	G	C	T	A	C	C	A	A	G	C	C	T	CGAGCTACCAAGCCT
H09	C	G	A	G	C	T	A	T	T	A	G	A	C	T	C	CGAGCTATTAGACTC
H10	T	C	G	C	T	A	C	T	T	A	A	A	T	T	T	TCGCTACTTAAATTT
H11	C	G	G	C	T	A	A	T	T	A	G	A	C	T	T	CGGCTAATTAGACTT
H12	C	G	A	G	C	T	C	T	T	A	A	A	C	T	T	CGAGCTCTTAAACTT
H13	C	C	G	G	C	T	C	C	C	A	A	G	C	C	T	CCGGCTCCCAAGCCT
H14	C	G	A	G	T	A	C	C	C	A	A	G	C	T	T	CGAGTACCCAAGCTT
H15	C	C	G	G	C	A	C	C	C	A	A	A	C	T	T	CCGGCACCCAAACTT
H16	C	G	A	G	C	A	C	C	C	A	A	G	C	T	T	CGAGCACCCAAGCTT
H17	T	C	G	C	T	T	C	T	C	A	G	A	C	T	T	TCGCTTCTCAGACTT
H18	C	G	A	G	C	T	A	T	T	A	G	A	T	T	C	CGAGCTATTAGATTC

Table S3: HSP70 SNPs and haplotype configurations

	SNPs					Concatenated Haplotypes
	0258	0909	0985	1044	1622	
H01	G	C	C	A	C	GCCAC
H02	A	C	C	G	C	ACCGC
H03	G	C	C	G	C	GCCGC
H04	A	C	C	A	C	ACCAC
H05	G	A	C	G	C	GACGC

Table S4: HSPA8 SNPs and haplotype configurations

	SNPs						Concatenated Haplotypes
	I1-027	0391	1072	1471	1831	3260	
H01	A	G	T	T	T	T	AGTTTT
H02	C	G	C	T	C	T	CGCTCT
H03	A	G	C	C	T	C	AGCCTC
H04	A	G	C	C	T	T	AGCCTT
H05	C	G	C	T	T	T	CGCTTT
H06	C	G	C	T	T	C	CGCTTC
H07	C	G	T	C	C	C	CGTCCC
H08	A	G	T	T	T	C	AGTTTC
H09	A	G	C	T	T	C	AGCTTC
H10	C	A	T	T	T	C	CATTTT
H11	C	G	C	T	C	C	CGCTCC

Table S5: HSPB1 SNPs and haplotype configurations

	SNPs					Concatenated Haplotypes
	133	280	I1-1005	459	559	
H01	G	C	G	T	C	GCGTC
H02	G	C	G	T	T	GCGTT
H03	G	T	A	T	T	GTATT
H04	G	C	A	T	T	GCATT

Table S6: IFI27L2 SNPs and haplotype configurations

	SNPs							Concatenated Haplotypes
	161	219	291	299	324	326	357	
H01	G	A	T	G	C	G	A	GATGCCGA
H02	G	A	T	G	T	C	A	GATGTCA
H03	G	G	G	G	T	C	A	GGGGTCA
H04	G	A	G	G	T	C	A	GAGGTCA
H05	T	A	G	C	T	C	C	TAGCTCC
H06	G	A	G	G	C	G	C	GAGGCGC
H07	G	A	G	G	C	G	A	GAGGCCGA

Table S7: IFRD1 SNPs and haplotype configurations

	SNPs			Concatenated Haplotypes
	0319	0390	1038	
H01	G	C	G	GCG
H02	G	G	G	GGG
H03	A	G	G	AGG

Table S8: IL1RL1 SNPs and haplotype configurations

	SNPs							Concatenated Haplotypes
	202-0149	202-0213	202-0548	202-0551	202-0572	202-0869	202-1056	
H01	G	T	A	C	C	G	C	GTACCGC
H02	G	T	C	C	T	A	T	GTCCTAT
H03	G	T	C	C	T	A	C	GTCCTAC
H04	A	A	C	C	T	A	T	AACCTAT
H05	G	A	C	G	T	A	T	GACGTAT
H06	G	T	A	C	C	A	T	GTACCAT
H07	G	A	A	C	C	A	T	GAACCAT
H08	G	A	C	C	T	A	T	GACCTAT

Table S9: SLC5A1 SNPs and haplotype configurations

	SNPs							Concatenated Haplotypes	
	0484	0906	110-6	1464	1505	2995	3190		3702
H01	T	C	G	G	G	C	G	T	TCGGGCGT
H02	C	C	G	G	G	C	G	T	CCGGGCGT
H03	T	T	G	G	G	C	G	T	TTGGGCGT
H04	T	C	A	G	G	C	A	C	TCAGGCAC
H05	C	C	G	G	G	C	A	T	CCGGGCAT
H06	T	C	G	G	G	C	A	T	TCGGGCAT
H07	T	C	G	G	G	T	G	T	TCGGGTGT
H08	T	T	G	G	G	C	A	T	TTGGGCAT
H09	C	C	G	G	G	C	A	C	CCGGGCAC
H10	T	C	G	G	G	C	A	C	TCGGGCAC

Table S10: TLR3 SNPs and haplotype configurations

	SNPs															Concatenated Haplotypes						
	0050	0095	0203	0274	0389	0538	0574	0719	0892	1000	1197	1247	1538	1781	1795		1936	2108	2299	2356	2397	2545
H01	T	G	A	A	A	A	A	A	T	A	C	G	A	C	G	G	T	T	G	A	G	TGAAAAAATACGACGTTGAG
H02	C	G	A	A	G	A	A	C	T	A	C	G	A	C	C	G	T	T	G	A	G	CGAAGAACTACGACCGTTGAG
H03	C	G	A	A	A	A	A	T	A	G	G	A	T	G	G	C	A	G	A	G	CGAAAAAATAGGATGGCAGAG	
H04	C	G	T	C	A	A	A	C	T	A	C	G	A	C	C	T	T	T	G	A	G	CGTCAAACACTACGACCTTTGAG
H05	C	G	T	C	A	A	A	T	A	C	G	A	C	G	G	C	A	G	A	G	CGTCAAATACGACGGCAGAG	
H06	C	G	T	A	A	A	A	T	A	G	G	A	T	G	G	C	A	G	A	G	CGTAAAAATAGGATGGCAGAG	
H07	C	G	A	A	A	G	A	T	A	G	G	A	T	G	G	C	A	G	A	G	CGAAAGAATAGGATGGCAGAG	
H08	T	G	A	A	A	A	A	T	A	G	G	A	T	G	G	C	A	G	A	G	TGAAAAAATAGGATGGCAGAG	
H09	C	G	A	A	A	A	A	T	A	G	G	G	C	G	G	T	T	G	A	G	CGAAAAAATAGGGCGTTGAG	
H10	C	G	A	A	A	A	A	T	A	C	G	A	C	G	G	T	T	G	A	G	CGAAAAAATACGACGTTGAG	

Table S11: TLR7 SNPs and haplotype configurations

	SNPs					Concatenated Haplotypes
	0417	0666	0708	0781	3169	
H01	C	A	T	G	A	CATGA
H02	C	G	A	G	A	CGAGA
H03	C	G	A	A	A	CGAAA
H04	C	A	A	G	A	CAAGA

Table S12: TOLLIP SNPs and haplotype configurations

	SNPs													Concatenated Haplotypes	
	00001	i-02190	i-04007	i-07212	i2-09101	0365	i3-12440	i4-14397	i5-17066	i5-19496	i5-22503	0767	0894		25950
H01	A	A	C	C	A	T	A	G	G	C	G	G	A	A	AACCATAGGCGGAA
H02	G	G	C	C	G	T	G	G	G	A	A	G	A	A	GGCCGTGGGAAGAA
H03	G	A	C	C	G	T	G	G	G	A	A	G	A	A	GACCGTGGGAAGAA
H04	A	A	C	T	A	T	G	G	G	C	G	G	A	A	AACTATGGGCGGAA
H05	G	G	T	C	A	T	A	A	G	A	A	G	A	A	GGTCATAAGAAGAA
H06	G	G	T	C	A	T	G	G	A	A	G	G	G	G	GGTCATGGAAGGGG
H07	G	A	T	C	G	T	G	G	G	A	A	G	A	A	GATCGTGGGAAGAA
H08	A	A	T	C	A	T	A	A	A	A	A	G	A	A	AATCATAAAAAGAA
H09	G	G	T	T	A	T	G	G	G	C	G	G	A	A	GGTTATGGGCGGAA
H10	A	A	C	C	A	T	A	A	A	A	G	G	A	G	AACCATAAAAGGAG
H11	A	A	T	C	A	T	A	A	A	C	G	G	A	A	AATCATAAACGGAA
H12	A	G	C	T	A	T	A	A	A	A	G	G	A	A	AGCTATAAAAGGAA
H13	A	A	C	C	G	T	G	G	G	A	A	G	A	A	AACCGTGGGAAGAA
H14	A	A	T	C	G	T	G	G	G	A	A	G	A	A	AATCGTGGGAAGAA
H15	G	G	T	C	A	T	A	G	G	C	G	G	A	A	GGTCATAGGCGGAA
H16	A	G	T	C	A	T	A	A	G	A	A	G	A	A	AGTCATAAGAAGAA
H17	G	A	T	C	A	T	G	G	A	C	A	G	A	G	GATCATGGACAGAG

Table S13: P-values of individual SNPs with significant effect

Time-point	Treatment	Trait	Gene	SNP	p-value	adjusted p-value
D23	9 days post heat; 2 days post NDV	pH	MX	PRO	0.002	0.0269
			MX	PRO2	0.002	0.0269
			MX	122	0.002	0.0269
			MX	125	0.002	0.0269
			MX	156	0.002	0.0269
			MX	351	0.001	0.0269
			MX	605	0.002	0.0269
			MX	1455	0.002	0.0269
			MX	1545	0.002	0.0269
			MX	1248	0.003	0.0363
			MHC	56	0.005	0.0465
			IFRD1	0319	0.005	0.0465