

Contig	SP ID	Evalue	Gene Description	Function
3596	Q9NW08	0	DNA-directed RNA polymerase III subunit RPC2	Plays a key role in sensing and limiting infection by intracellular bacteria and DNA viruses. Acts as nuclear and cytosolic DNA sensor involved in innate immune response.
173	Q9XIE2	0	ABC transporter G family member 36	Key factor that controls the extent of cell death in the defense response. Necessary for both callose deposition and glucosinolate activation in response to pathogens.
5918	Q39023	1.00E-76	Mitogen-activated protein kinase 3	Involved in oxidative stress-mediated signaling cascade and the innate immune MAP kinase signaling cascade (MEKK1, MKK4/MKK5 and MPK3/MPK6) downstream of bacterial flagellin receptor FLS2.
10646	P34790	4.00E-43	Peptidyl-prolyl cis-trans isomerase CYP18-3	Triggers the activation of bacterial AvrRpt2 protease activity upon infection by P.syringae. Activated AvrRpt2 confers virulence in plants.
2248	Q6INN8	1.00E-25	SAM domain and HD domain-containing protein 1	Putative nuclease involved in innate immune response by acting as a negative regulator of the cell-intrinsic antiviral response.
6658	Q9CR14	7.00E-20	E3 ubiquitin-protein ligase FANCL	Ubiquitin ligase protein that mediates monoubiquitination of FANCD2, a key step in the DNA damage pathway. May be required for proper primordial germ cell proliferation in the embryonic stage.
10378	Q9LMA1	3.00E-17	Probable flavin-containing monooxygenase 1	Required for the establishment of systemic acquired resistance (SAR). Not involved in local defense mechanisms. Confers a salicylic acid-dependent (SA) resistance to virulent pathogens such as P.syringae pv tomato and H.parasitica.
5840	P43138	1.00E-16	DNA-(apurinic or apyrimidinic site) lyase	Multifunctional protein that plays a central role in the cellular response to oxidative stress. The two major activities of APEX1 in DNA repair and redox regulation of transcriptional factors.
2545	Q8JIR2	6.00E-14	Zinc metalloproteinase/disintegrin	Metalloproteinase rhodostoxin: zinc protease from snake venom that acts in hemorrhage.
1017	P15705	1.00E-13	Heat shock protein ST11	May play a role in mediating the heat shock response of some HSP70 genes. It is required for optimal growth of yeast cells at both low and high temperature.
2646	Q7T364	2.00E-06	Tumor necrosis factor, alpha-induced protein 8-like protein 2 B	Acts as a negative regulator of innate and adaptive immunity by maintaining immune homeostasis. Negative regulator of Toll-like receptor and T-cell receptor function.
9380	Q86DA5	4.00E-06	Sterile alpha and TIR motif-containing protein tir-1	Required for both innate immune response and specification of AWC(OFF) neuron. Plays a central role in resistance to infection to a broad range of bacterial and fungi pathogens. Required for expression of antimicrobial peptides nlp-29 and nlp-31.
6476	Q6H595	3.00E-05	Zinc finger AN1 domain-containing stress-associated protein 17	May be involved in environmental stress response.

