**Table S8. The down-regulated differential expressed genes enriched in the biological process of response to stress (GO:0006950) for transgenic *R1*, *R3a*, and *R3b* lines under 89148 infection**.

| **Gene ID** | **Log2FC** | **Regulated** | **Gene annotation** | **Transgenic lines** |
| --- | --- | --- | --- | --- |
| PGSC0003DMG400000417 | -1.21  | down | Superoxide dismutase  | TR1 |
| PGSC0003DMG400000505 | -3.74  | down | Alpha-DOX1  |
| PGSC0003DMG400000523 | -1.02  | down | Kinesin light chain  |
| PGSC0003DMG400001774 | -1.98  | down | Peroxidase  |
| PGSC0003DMG400002275 | -1.55  | down | Cc-nbs-lrr resistance protein  |
| PGSC0003DMG400002552 | -1.64  | down | Delta TIP  |
| PGSC0003DMG400002920 | -1.40  | down | RGC1  |
| PGSC0003DMG400003056 | -2.68  | down | Ethylene-responsive proteinase inhibitor 1  |
| PGSC0003DMG400003574 | -1.13  | down | Ccaat-binding transcription factor  |
| PGSC0003DMG400003748 | -2.65  | down | Peroxidase  |
| PGSC0003DMG400003822 | -1.20  | down | Cellulose synthase  |
| PGSC0003DMG400004561 | -1.50  | down | Late blight resistance protein Rpi-blb2  |
| PGSC0003DMG400005279 | -1.48  | down | Peroxidase  |
| PGSC0003DMG400005351 | -1.09  | down | MLO1  |
| PGSC0003DMG400006145 | -1.15  | down | Histidine kinase 1, 2, 3 plant  |
| PGSC0003DMG400006386 | -2.79  | down | Peroxidase  |
| PGSC0003DMG400006663 | -2.33  | down | ASR3  |
| PGSC0003DMG400008393 | -4.31  | down | Cc-nbs-lrr resistance protein  |
| PGSC0003DMG400008595 | -1.15  | down | Cc-nbs-lrr resistance protein  |
| PGSC0003DMG400010465 | -2.58  | down | Peroxidase  |
| PGSC0003DMG400010660 | -1.03  | down | Superoxide dismutase  |
| PGSC0003DMG400010870 | -1.41  | down | NAC domain protein  |
| PGSC0003DMG400011640 | -1.72  | down | Peroxidase  |
| PGSC0003DMG400012163 | -1.21  | down | Ubiquitin ligase protein cop1  |
| PGSC0003DMG400012443 | -1.06  | down | Phytosulfokine receptor  |
| PGSC0003DMG400012471 | -1.61  | down | Conserved gene of unknown function  |
| PGSC0003DMG400012589 | -3.41  | down | Cationic peroxidase  |
| PGSC0003DMG400012974 | -1.03  | down | Conserved gene of unknown function  |
| PGSC0003DMG400013486 | -7.12  | down | Disease resistance protein  |
| PGSC0003DMG400013721 | -4.99  | down | Plant disease resistant protein  |
| PGSC0003DMG400013736 | -2.48  | down | BED finger-nbs-lrr resistance protein  |
| PGSC0003DMG400014047 | -1.15  | down | Disease resistance protein R3a  |
| PGSC0003DMG400014867 | -2.11  | down | Peroxidase  |
| PGSC0003DMG400015693 | -1.93  | down | Resistance gene  |
| PGSC0003DMG400016730 | -1.16  | down | Sucrose synthase  |
| PGSC0003DMG400017439 | -1.01  | down | Alpha DNA polymerase  |
| PGSC0003DMG400018462 | -1.07  | down | Disease resistance protein  |
| PGSC0003DMG400018570 | -1.64  | down | Disease resistance protein R3a  |
| PGSC0003DMG400018903 | -3.50  | down | Cc-nbs-lrr resistance protein  |
| PGSC0003DMG400019418 | -1.14  | down | Cc-nbs-lrr resistance protein  |
| PGSC0003DMG400019435 | -1.35  | down | Wound-induced protein WIN2  |
| PGSC0003DMG400019627 | -1.09  | down | Disease resistance protein Gpa2  |
| PGSC0003DMG400019803 | -1.18  | down | NBS-LRR resistance protein  |
| PGSC0003DMG400020433 | -2.23  | down | DNAJ heat shock N-terminal domain-containing protein  |
| PGSC0003DMG400021382 | -3.12  | down | Conserved gene of unknown function  |
| PGSC0003DMG400021986 | -4.71  | down | Late blight resistance protein Rpi-blb2  |
| PGSC0003DMG400022541 | -2.61  | down | Peroxidase 72  |
| PGSC0003DMG400023751 | -1.11  | down | Basic blue copper protein  |
| PGSC0003DMG400024477 | -2.92  | down | Calmodulin binding protein  |
| PGSC0003DMG400024967 | -1.25  | down | Peroxidase  |
| PGSC0003DMG400026346 | -1.87  | down | F-box family protein  |
| PGSC0003DMG400026428 | -1.22  | down | Sucrose-phosphate synthase isoform B  |
| PGSC0003DMG400026433 | -1.29  | down | ATP binding protein  |
| PGSC0003DMG400026575 | -2.34  | down | Class III peroxidase  |
| PGSC0003DMG400028308 | -1.27  | down | LIGULELESS1 protein  |
| PGSC0003DMG400028426 | -1.47  | down | Cellulose synthase catalytic subunit  |
| PGSC0003DMG400029457 | -1.16  | down | Hero resistance protein  |
| PGSC0003DMG400030134 | -1.18  | down | MLO1  |
| PGSC0003DMG400030267 | -3.27  | down | Bacterial spot disease resistance protein 4  |
| PGSC0003DMG400030382 | -5.51  | down | Class III peroxidase  |
| PGSC0003DMG400030419 | -2.19  | down | Conserved gene of unknown function  |
| PGSC0003DMG400030927 | -1.21  | down | Hemoglobin  |
| PGSC0003DMG400031318 | -1.86  | down | Tir-nbs-lrr resistance protein  |
| PGSC0003DMG401007575 | -1.11  | down | Cc-nbs-lrr resistance protein  |
| PGSC0003DMG401008349 | -2.19  | down | Cc-nbs-lrr resistance protein  |
| PGSC0003DMG401009819 | -1.34  | down | Resistance protein PSH-RGH6  |
| PGSC0003DMG401010943 | -1.36  | down | Nbs-lrr resistance protein  |
| PGSC0003DMG401016933 | -1.40  | down | Disease resistance protein; Calcium-binding EF-hand; AAA ATPase  |
| PGSC0003DMG401027402 | -1.99  | down | Disease resistance protein R3a  |
| PGSC0003DMG401029332 | -2.47  | down | Peroxidase  |
| PGSC0003DMG401030920 | -2.30  | down | Cucumber peeling cupredoxin  |
| PGSC0003DMG402015497 | -2.16  | down | Pericarp peroxidase 3  |
| PGSC0003DMG400000417 | -2.05  | down | Superoxide dismutase  | TR3a |
| PGSC0003DMG400000505 | -2.32  | down | Alpha-DOX1  |
| PGSC0003DMG400001774 | -1.69  | down | Peroxidase  |
| PGSC0003DMG400002275 | -1.04  | down | Cc-nbs-lrr resistance protein  |
| PGSC0003DMG400002552 | -1.54  | down | Delta TIP  |
| PGSC0003DMG400003056 | -1.39  | down | Ethylene-responsive proteinase inhibitor 1  |
| PGSC0003DMG400003574 | -1.40  | down | Ccaat-binding transcription factor  |
| PGSC0003DMG400003654 | -1.06  | down | Peroxidase  |
| PGSC0003DMG400003748 | -3.26  | down | Peroxidase  |
| PGSC0003DMG400003822 | -1.30  | down | Cellulose synthase  |
| PGSC0003DMG400005273 | -1.02  | down | Peroxidase  |
| PGSC0003DMG400005279 | -2.06  | down | Peroxidase  |
| PGSC0003DMG400005390 | -1.13  | down | Calmodulin-binding protein  |
| PGSC0003DMG400005649 | -1.06  | down | Calmodulin-binding protein  |
| PGSC0003DMG400006386 | -3.07  | down | Peroxidase  |
| PGSC0003DMG400006533 | -2.32  | down | Rpi protein  |
| PGSC0003DMG400006570 | -1.00  | down | Tospovirus resistance protein C  |
| PGSC0003DMG400006663 | -2.15  | down | ASR3  |
| PGSC0003DMG400007848 | -1.48  | down | Phospholipase D  |
| PGSC0003DMG400007993 | -1.23  | down | Pheromone receptor  |
| PGSC0003DMG400008393 | -4.50  | down | Cc-nbs-lrr resistance protein  |
| PGSC0003DMG400009883 | -1.02  | down | Calcium-dependent protein kinase  |
| PGSC0003DMG400010660 | -1.61  | down | Superoxide dismutase  |
| PGSC0003DMG400010870 | -1.79  | down | NAC domain protein  |
| PGSC0003DMG400011640 | -1.93  | down | Peroxidase  |
| PGSC0003DMG400012471 | -1.78  | down | Conserved gene of unknown function  |
| PGSC0003DMG400012589 | -2.82  | down | Cationic peroxidase  |
| PGSC0003DMG400012974 | -1.02  | down | Conserved gene of unknown function  |
| PGSC0003DMG400013486 | -7.32  | down | Disease resistance protein  |
| PGSC0003DMG400013736 | -2.13  | down | BED finger-nbs-lrr resistance protein  |
| PGSC0003DMG400014867 | -2.28  | down | Peroxidase  |
| PGSC0003DMG400015693 | -1.19  | down | Resistance gene  |
| PGSC0003DMG400016730 | -1.49  | down | Sucrose synthase  |
| PGSC0003DMG400017334 | -1.09  | down | Heat shock factor protein  |
| PGSC0003DMG400018271 | -1.05  | down | Calmodulin binding protein  |
| PGSC0003DMG400019418 | -1.09  | down | Cc-nbs-lrr resistance protein  |
| PGSC0003DMG400019435 | -1.36  | down | Wound-induced protein WIN2  |
| PGSC0003DMG400020252 | -2.01  | down | Peroxidase 55  |
| PGSC0003DMG400020433 | -1.48  | down | DNAJ heat shock N-terminal domain-containing protein  |
| PGSC0003DMG400020799 | -2.40  | down | Cationic peroxidase 1  |
| PGSC0003DMG400022541 | -2.53  | down | Peroxidase 72  |
| PGSC0003DMG400023751 | -1.81  | down | Basic blue copper protein  |
| PGSC0003DMG400024477 | -3.91  | down | Calmodulin binding protein  |
| PGSC0003DMG400024754 | -1.58  | down | Respiratory burst oxidase homolog protein B  |
| PGSC0003DMG400024967 | -1.35  | down | Peroxidase  |
| PGSC0003DMG400026346 | -2.06  | down | F-box family protein  |
| PGSC0003DMG400026433 | -1.11  | down | ATP binding protein  |
| PGSC0003DMG400026575 | -3.02  | down | Class III peroxidase  |
| PGSC0003DMG400028426 | -1.61  | down | Cellulose synthase catalytic subunit  |
| PGSC0003DMG400029457 | -1.48  | down | Hero resistance protein  |
| PGSC0003DMG400029724 | -1.03  | down | PHO2  |
| PGSC0003DMG400030134 | -1.24  | down | MLO1  |
| PGSC0003DMG400030382 | -1.77  | down | Class III peroxidase  |
| PGSC0003DMG400030419 | -5.25  | down | Conserved gene of unknown function  |
| PGSC0003DMG400030927 | -1.48  | down | Hemoglobin  |
| PGSC0003DMG401007628 | -1.22  | down | Polyribonucleotide nucleotidyltransferase  |
| PGSC0003DMG401015877 | -1.32  | down | NBS-LRR protein  |
| PGSC0003DMG401027402 | -1.07  | down | Disease resistance protein R3a  |
| PGSC0003DMG401029332 | -3.40  | down | Peroxidase  |
| PGSC0003DMG401030920 | -2.81  | down | Cucumber peeling cupredoxin  |
| PGSC0003DMG402015497 | -3.64  | down | Pericarp peroxidase 3  |
| PGSC0003DMG400000417 | -2.86  | down | Superoxide dismutase  | TR3b |
| PGSC0003DMG400000505 | -5.07  | down | Alpha-DOX1  |
| PGSC0003DMG400000511 | -1.10  | down | Class III peroxidase  |
| PGSC0003DMG400001066 | -1.05  | down | Potassium channel  |
| PGSC0003DMG400001223 | -3.39  | down | NAC domain protein  |
| PGSC0003DMG400001774 | -2.79  | down | Peroxidase  |
| PGSC0003DMG400002552 | -1.84  | down | Delta TIP  |
| PGSC0003DMG400002920 | -1.53  | down | RGC1  |
| PGSC0003DMG400003056 | -4.46  | down | Ethylene-responsive proteinase inhibitor 1  |
| PGSC0003DMG400003574 | -1.19  | down | Ccaat-binding transcription factor  |
| PGSC0003DMG400003654 | -1.03  | down | Peroxidase  |
| PGSC0003DMG400003748 | -2.53  | down | Peroxidase  |
| PGSC0003DMG400003822 | -1.23  | down | Cellulose synthase  |
| PGSC0003DMG400004064 | -2.34  | down | Subtilisin inhibitor 1  |
| PGSC0003DMG400005062 | -1.42  | down | Peroxidase  |
| PGSC0003DMG400005273 | -1.43  | down | Peroxidase  |
| PGSC0003DMG400005279 | -1.67  | down | Peroxidase  |
| PGSC0003DMG400005390 | -1.86  | down | Calmodulin-binding protein  |
| PGSC0003DMG400005649 | -1.09  | down | Calmodulin-binding protein  |
| PGSC0003DMG400006386 | -2.82  | down | Peroxidase  |
| PGSC0003DMG400006663 | -2.53  | down | ASR3  |
| PGSC0003DMG400006855 | -1.02  | down | S-adenosyl-methionine-sterol-C-methyltransferase  |
| PGSC0003DMG400008588 | -1.09  | down | Disease resistance protein RGA4  |
| PGSC0003DMG400009817 | -1.97  | down | Major latex  |
| PGSC0003DMG400010465 | -4.52  | down | Peroxidase  |
| PGSC0003DMG400010660 | -2.02  | down | Superoxide dismutase  |
| PGSC0003DMG400010870 | -1.37  | down | NAC domain protein  |
| PGSC0003DMG400011640 | -2.10  | down | Peroxidase  |
| PGSC0003DMG400011974 | -1.01  | down | BZIP domain class transcription factor  |
| PGSC0003DMG400012589 | -3.37  | down | Cationic peroxidase  |
| PGSC0003DMG400013486 | -2.37  | down | Disease resistance protein  |
| PGSC0003DMG400013721 | -5.00  | down | Plant disease resistant protein  |
| PGSC0003DMG400014055 | -1.62  | down | Peroxidase  |
| PGSC0003DMG400014867 | -1.99  | down | Peroxidase  |
| PGSC0003DMG400015219 | -1.83  | down | Miraculin  |
| PGSC0003DMG400016278 | -1.11  | down | Mannosyl-oligosaccharide 1,2-alpha-mannosidase IA  |
| PGSC0003DMG400016460 | -1.21  | down | 15.4 kDa class V heat shock protein  |
| PGSC0003DMG400016730 | -1.98  | down | Sucrose synthase  |
| PGSC0003DMG400017334 | -1.18  | down | Heat shock factor protein  |
| PGSC0003DMG400017439 | -1.07  | down | Alpha DNA polymerase  |
| PGSC0003DMG400018271 | -1.45  | down | Calmodulin binding protein  |
| PGSC0003DMG400018441 | -1.19  | down | Late blight resistance protein  |
| PGSC0003DMG400018975 | -1.35  | down | Calmodulin binding protein  |
| PGSC0003DMG400019087 | -3.85  | down | REX1 DNA Repair family protein  |
| PGSC0003DMG400019435 | -1.11  | down | Wound-induced protein WIN2  |
| PGSC0003DMG400020252 | -2.13  | down | Peroxidase 55  |
| PGSC0003DMG400020433 | -1.02  | down | DNAJ heat shock N-terminal domain-containing protein  |
| PGSC0003DMG400020799 | -2.37  | down | Cationic peroxidase 1  |
| PGSC0003DMG400021986 | -4.72  | down | Late blight resistance protein Rpi-blb2  |
| PGSC0003DMG400022341 | -1.04  | down | Suberization-associated anionic peroxidase 2  |
| PGSC0003DMG400022541 | -2.99  | down | Peroxidase 72  |
| PGSC0003DMG400023326 | -1.26  | down | ATDGK2  |
| PGSC0003DMG400023751 | -2.55  | down | Basic blue copper protein  |
| PGSC0003DMG400024237 | -1.39  | down | Conserved gene of unknown function  |
| PGSC0003DMG400024309 | -1.40  | down | Conserved gene of unknown function  |
| PGSC0003DMG400024477 | -3.13  | down | Calmodulin binding protein  |
| PGSC0003DMG400024967 | -1.57  | down | Peroxidase  |
| PGSC0003DMG400026346 | -1.76  | down | F-box family protein  |
| PGSC0003DMG400026575 | -3.60  | down | Class III peroxidase  |
| PGSC0003DMG400027283 | -2.82  | down | AT-HSFB3 (Arabidopsis thaliana heat shock transcription factor B3)  |
| PGSC0003DMG400027728 | -2.01  | down | Conserved gene of unknown function  |
| PGSC0003DMG400028426 | -1.56  | down | Cellulose synthase catalytic subunit  |
| PGSC0003DMG400029542 | -1.45  | down | Sensor histidine kinase  |
| PGSC0003DMG400030134 | -1.66  | down | MLO1  |
| PGSC0003DMG400030359 | -1.05  | down | Pyridoxine biosynthesis protein isoform A  |
| PGSC0003DMG400030382 | -5.51  | down | Class III peroxidase  |
| PGSC0003DMG400030419 | -3.13  | down | Conserved gene of unknown function  |
| PGSC0003DMG400030927 | -1.13  | down | Hemoglobin  |
| PGSC0003DMG401008349 | -1.05  | down | Cc-nbs-lrr resistance protein  |
| PGSC0003DMG401013782 | -1.04  | down | Transcription factor  |
| PGSC0003DMG401029332 | -2.60  | down | Peroxidase  |
| PGSC0003DMG401030920 | -2.77  | down | Cucumber peeling cupredoxin  |
| PGSC0003DMG402015497 | -3.05  | down | Pericarp peroxidase 3  |
| PGSC0003DMG403007838 | -1.41  | down | Purple acid phosphatase 3  |