### INDUCED

#### IMMUNITY

**Antimicrobial peptides genes**

| Gene.Title | Gene.Symbol | CG | Rel | sys | gust | CaeElec15 | RelElec12 | RelUc | RelElec19 | AvgExp |
|------------|-------------|----|-----|-----|------|-----------|----------|-------|----------|--------|
| Metchnikowin | Mtk | CG1875 | R | + | + | + | 57.2 | 1.1 | -1 | 1.1 | 3.5 |
| attacin | AttC | CG6470 | R | + | + | + | 23.4 | -1.1 | -1.7 | -1.1 | 5.8 |
| Cecropin | CecC | CG1373 | R | + | + | + | 18.9 | -1.1 | -1.1 | 1.1 | 2.7 |
| attacin | AttD | CG7629 | R | + | + | + | 17.1 | -2 | -2 | 1 | 4.7 |
| defensin-like protein | DptB | CG10794 | R | + | + | + | 16.8 | -3.7 | -3.7 | -1 | 6.8 |
| attacin | AttA | CG31372 | R | + | + | + | 16.3 | -5.8 | -5.8 | 1 | 7.9 |
| defensin | Def | CG31385 | R | + | + | + | 3.9 | -6.4 | -7.07 | 1.1 | 11.6 |

**Defense reaction**

| Tumor necrosis factor-like cytokine 1 | Tnf1 | CG6186 | R | + | + | 3.6 | -1.1 | 1.3 | -1.4 | 9.6 |
| virus-induced RNA 1 | vir-1 | CG31764 | R | 2.1 | 1.8 | 2.3 | 9 |

**Recognition**

| PGRP-S | CG7496 | R | + | + | + | 7.3 | -2.3 | -1.9 | -1.2 | 5.6 |
| PGRP-SB1 | CG9681 | R | + | + | + | 6.7 | -2 | -1.4 | -1.4 | 6.5 |
| PGRP-like | PGRP-LF | CG4437 | R | + | + | + | 5.3 | 1.8 | -1.5 | 2.6 | 8 |
| Peptidoglycan recognition protein | PGRP-LB | CG14704 | + | + | + | 2.4 | 1.8 | 1 | 1.3 | 5.4 |
| semmelweis | PGRP-SA | CG11709 | + | + | 2.1 | 1.5 | 1.1 | 1.4 | 10.8 |

**Thiolester containing protein 1**

| Tep1 | CG18906 | R | 4.8 | 2.8 | 5.1 | -1.8 | 4 |

**Thiolester containing protein II**

| TepII | CG7052 | R | + | + | 2.9 | 1.3 | -1.1 | 1.5 | 8.3 |

**Lectin28C// nodopsin**

| lectin-28C | CG7166 | R | - | 2.5 | -1.6 | -1.7 | 1.1 | 6.3 |
| lectin-galC1 | CG9797 | R | 2.4 | -5.9 | -3.2 | -1.8 | 6.6 |

**Imd pathway**

| CG15678 | R | 2.7 | -2.2 | -2.5 | 1.1 | 7.1 |

**Phagocytosis**

| CG30427 | R | 2.7 | -2.2 | -2.5 | 1.1 | 7.1 |

### STRESS RESPONSE/DETOXIFICATION

**Stress response**

| Turandot A | CG31509 | R | + | 24.3 | 28.3 | 8.3 | 3.4 | 4.3 |
| Cyp31z2 | CG5137 | 2.7 | 4.9 | 1.5 | 3.1 | 6.6 |
| Heat shock protein cognate 1 | Hsc70-1 | CG8937 | 2.6 | -1 | -1.6 | 1.6 | 5.7 |
| Cyp9f2 | CG14667 | 2.3 | 3.5 | 1.7 | 2 | 8.9 |
| Cyp4d21 | CG7830 | 2.4 | -9.9 | -13.0 | 1.4 | 7.7 |
| Cytochrome P450-4e1 | CG2027 | 2 | 4.8 | 3.5 | 1.4 | 6.1 |
| Cytochrome P450-9b1 | CG4485 | 2 | 2.1 | 1.4 | 1.5 | 7.6 |
| Cyp31z2A | CG10994 | 2 | 4.4 | 2.4 | 1.8 | 7.8 |
| Cyp2p2 | CG1944 | 2.2 | -2.4 | -2.9 | 1.2 | 6.2 |

**ROS detoxification**

| CG10962 | R | 7.3 | 1 | -1.3 | 1.4 | 6.3 |
| CG12446 // CG40486 | CG12446 // CG40486 | CG40486 | 3.2 | 7 | 3.2 | 2.2 | 3 |
| CG3835 | CG3835 | CG3835 | + | 2.1 | 1.8 | -1.1 | 2 | 10 |
| CG3301 | CG3301 | CG3301 | + | 2.1 | 1.4 | -1.3 | 1.8 | 5.9 |

**SIGNALING**

**Insulin pathway**

| insulin-stimulated eIF-2A binding prote | Thor | CG8846 | + | 2.2 | 3.1 | 1.5 | 2.1 | 11.1 |
| insulin receptor | InR | CG18402 | 2 | 2.3 | -1 | 2.3 | 5.7 |

**Signaling**

| medullatless | ana | CG8084 | 2.8 | 3.7 | 1.1 | 3.4 | 4.7 |
| methuselah-like 4 | mth4 | CG6536 | 2.5 | 3.1 | 1.5 | 2 | 8 |
| CG11438 | CG11438 | CG11438 | 2.3 | 4.7 | 1.9 | 2.5 | 6.8 |
| CG8334 | CG8334 | CG8334 | 2.4 | 1.3 | 1.1 | 1.2 | 6 |
| CG11919 // CG18003 | CG11919 // CG18003 | CG18003 | 2.3 | -1.3 | -2.3 | 1.7 | 6.4 |
| CG8665 | CG8665 | CG8665 | 2.1 | 2.2 | 1.6 | 1.4 | 6.1 |
| focal adhesion kinase | PFA | CG3969 | -2 | 1.2 | 1 | 1.2 | 8.5 |
| CG17278 | CG17278 | CG17278 | 2 | -1.3 | -1.3 | 1 | 10.6 |

**PEPTIDASE/HINIBITOR**

**Serine protease**

| CG11668 | CG11668 | CG11668 | R | 6 | 1 | 1.1 | -1.1 | 5.6 |
| CG6639 // Regulator of G-protein sign | CG6639 // RSG7 | CG6639 | + | 5.6 | 2.4 | -1.6 | 4 | 6.3 |
| CG18563 | CG18563 | CG18563 | + | 3.3 | 1.8 | -1.4 | 2.5 | 5.7 |
| CG6909 | CG6909 | CG6909 | + | 2.7 | -1.5 | -1.7 | 1.1 | 5.4 |
| CG17572 | CG17572 | CG17572 | 2.2 | 4.2 | 2.7 | 1.5 | 6.6 |
| CG11313 | CG11313 | CG11313 | R | 2.1 | -1.9 | -1.8 | 1.6 | 6.6 |
| CG896 | CG896 | CG896 | 2.1 | 1.2 | 1 | 1.2 | 10.4 |
| CG11529 | CG11529 | CG11529 | 2 | 2 | 1 | 1.1 | 11.4 |

**Serine-type endopeptidase inhibitor activity**

| CG16713 | CG16713 | CG16713 | + | 2.7 | -1.6 | -4.7 | 3 | 7.7 |
| CG6663 | CG6663 | CG6663 | R | 2.3 | 1 | 1.1 | -1 | 5.1 |
### Other peptidase
| CG5863 | CG6357 | CG6357 |
|--------|--------|--------|
| 3.5    | 1.5    | -1.4   |
| 2.1    | 2.1    | -2     |

### METABOLISM/TRANSPORTERS

#### Transports

| CG8775 | CG72985 | R  |
|--------|---------|----|
| 4.6    | -1.6   | -2.2 |
| 2.7    | -1.6   | -2.2 |
| 2.3    | -1.4   | -1.5 |

#### Metabolism

| CG4716 | CG7575 | CG4716 |
|--------|--------|--------|
| -2.6   | -1.3   | -1.0  |
| 2.1    | 1.7    | 1.3   |
| 2.7    | 1.4    | 1.4   |

#### Other peptidase

| CG13283 | CG13841 |
|--------|---------|
| 3.4    | 1.8    |
| 2.2    | 6.1    |

### TRANSPORTERS

| CG9766 |
|--------|
| 2.1    |

### ELASIN-LIKE

| CG13335 |
|---------|
| 3.6    |

### OTHER PEPTIDASE

| CG7021 |
|--------|
| 2.7    |

### REPLICATED

#### GC1982

| CG7021 |
|--------|
| 2.7    |

#### GC7005

| CG13841 | CG4716 |
|---------|--------|
| 2.1    | -2.7   |

#### CG9766

| CG13841 | CG4716 |
|---------|--------|
| 2.1    | -2.7   |

### KRONEN

#### CG5863

| CG5863 | CG5863 |
|--------|--------|
| 3.5    | 1.5    |
| 2.1    | 2.1    |

### STRESS RESPONSE/DETOXIFICATION/ROS

#### Stress-detoxyfication

| Gluthathione S transference D7 |
| GdstD7 |
| CG4371 |
| +      |
| -5.4   |
| -4.3   |
| 2.7    |

### OXIDOREDUCTION

#### Sordoh-1

| CG9182 |
|--------|
| -2.2   |
| -1.7   |
| -1     |

### REPRESSIBLE

#### CG12896

| CG12896 | CG12896 |
|---------|---------|
| 3.5    | 1.5    |
| 2.1    | 2.1    |

| CG14926 | CG14926 |
|---------|---------|
| 2.1    | 2.1    |
| 2.8    | 1.2    |
### CHITIN/CUTICLE

**Chitin binding protein/cuticle**

| CG31559 | CG31559 | CG31559 | R | -2.8 | -3.5 | -5.5 | 1.6 | -10.1 |

**Chitin-binding peritrophin-A**

| Chit5 | CG9307 | R | -7.6 | -6.3 | -3.7 | -1.8 | -10.7 |

**Peritrophin-15b**

| CG31893 | -2.6 | -2.7 | -1.3 | -1.5 | 6.4 |

**Acps65a**

| Acp65Sa | CG10297 | -5 | -1.2 | 9.2 | -8.8 | 0.7 |

**Ecdysone-dependent gene 78E**

| Edg78E | CG7673 | R | -2.7 | -2.3 | -1.8 | -1.3 | 5.2 |

**Lcp85Af**

| CG10533 | -2.2 | -1.7 | -1.8 | -9.8 | 11.2 |

**Lcp85Ad**

| CG10480 | -2.1 | -1.7 | -2.8 | 1.6 | 1.8 |

**GCR(ich)**

| CG9260 | -2.6 | -2.1 | -1.2 | -1.7 | 7.4 |

### PEPTIDASES/INHIBITOR

**Serine protease**

| CG5255 | CG5255 | CG5255 | R | -3.4 | -3.5 | -2.7 | -1.3 | 5.9 |

| CG1728 | CG31728 | CG1728 | -2.7 | -2.5 | -1.8 | -1.4 | 9.7 |

| CG32808 | CG32808 | CG32808 | R | -2.1 | -1.4 | -1.4 | -1.7 | 7.7 |

**serine protease inhibitor**

| Spn433Aa | CG12172 | R | -2.5 | -2.1 | -1.9 | -1.1 | 5.3 |

| CG1342 | CG1342 | CG1342 | -2.6 | -3.7 | -2.1 | -2.7 | 6.5 |

**serine protease inhibitor 1**

| Spn433Aa | CG12172 | R | -2.5 | -2.1 | -1.9 | -1.1 | 5.3 |

**Other peptidase**

| CG3502 | CG3502 | CG3502 | R | -4.6 | -3.7 | -3.9 | -1.9 | 8.7 |

| CG8560 | CG8560 | CG8560 | -3.4 | -3.4 | -1.4 | -1.4 | 9.7 |

| CG8773 | CG8773 | CG8773 | -2 | -1.1 | 1.2 | -1.1 | 5.4 |

| CG10280 | CG10280 | CG10280 | -2.7 | -1.5 | 1 | -1.5 | 5.9 |

| CG4017 | CG4017 | CG4017 | R | -2.7 | -3.2 | -2.6 | -1.2 | 6.4 |

### METABOLISM/TRANSPORTERS

**Metabolism**

| CG7529 | CG7529 | CG7529 | R | -2.7 | -1.4 | -1.6 | 1.2 | 6.3 |

| CG12480 | CG12480 | CG12480 | -2.2 | -3.2 | -0.3 | 1.2 | 8.5 |

| CG9340 | CG9340 | CG9340 | -2.2 | -3.2 | -1.3 | -2.4 | 10.5 |

| SP1209 | SP1209 | CG1956 | -2.1 | -2 | -1.2 | -1.2 | 10.2 |

| CG8112 | CG8112 | CG8112 | -2.5 | -2.5 | -2.1 | -1.3 | 10.5 |

### MISCELLANEOUS

**Neuronal activity-neuropeptide**

| Nplp1 | CG3441 | R | -2.5 | -4.9 | -4.3 | -1.1 | 6.1 |

| Odp-99d | CG15505 | R | -2.4 | -3 | -0.6 | 3.4 | 9.8 |

| Syx4 | CG2715 | R | -2.2 | -3.4 | -2.8 | 1.1 | 6.6 |

| Ptc-related Disp-like | CG11212 | R | -2.1 | -1.6 | -1.6 | 1 | 8.6 |

| Metal ion binding | MtnA | CG9470 | R | -4.3 | 1.9 | -2.6 | -1.9 | 8.5 |

| Metallothionein B | MtnB | CG3132 | -2.2 | -2.2 | -1.7 | -1.3 | 4.8 |

### Various

| CG6164 | Npc2f | CG6164 | -2.8 | -2.8 | -2.4 | -1.4 | 5.5 |

| GV1 | GV1 | CG12023 | -2.2 | -1.6 | 1.1 | -1.7 | 11.3 |

| windbeutel | wbi | CG7225 | -2.4 | -2 | -1.1 | -1.8 | 5.5 |

### UNKNOWN

| CG13679 | CG13679 | CG13679 | R | -23.7 | -115 | -28 | -4.1 | 12.6 |

| CG14568 | CG14568 | CG14568 | -15 | -26.4 | -12.4 | -2.1 | 9.7 |

| CG14569 | CG14569 | CG14569 | -12 | -38.9 | -14.9 | 9.7 | 10.8 |

| CG14573 | CG14573 | CG14573 | -7.2 | -8.2 | -3.6 | -2.1 | 9.1 |

| Osiris | Osiris | CG15189 | -5.8 | -10.7 | -4.4 | -2.5 | 8.7 |

| CG11345 | CG11345 | CG11345 | -5.6 | -5.6 | -3.2 | -1.8 | 11.9 |

| CG14457 | CG14457 | CG14457 | -5.5 | -2.8 | -1.4 | -1.9 | 7.4 |

| CG14564 | CG14564 | CG14564 | -5.3 | -7.3 | -6.3 | -1.2 | 10.4 |

| CG6908 | CG6908 | CG6908 | -4.7 | -6.3 | -6 | -3 | 7.2 |

| CG3059 | CG3059 | CG3059 | -4.5 | -12.7 | -6.7 | -1.8 | 11.7 |

| CG13047 | CG13047 | CG13047 | -4.4 | -6.5 | -2.2 | -2.9 | 13.2 |

| CG14456 | CG14456 | CG14456 | -3.5 | -7.9 | -5.9 | 1.2 | 9.8 |

| CG14457 | CG14457 | CG14457 | -3.8 | -2.3 | -1.4 | -1.7 | 9.1 |

| CG11382 | CG11382 | CG11382 | -3.6 | -5.1 | -3.9 | -1.4 | 7.7 |

| CG15226 | CG15226 | CG15226 | -3.6 | -5 | 1.9 | -9.5 | 9.2 |

| CG14143 | CG14143 | CG14143 | -4.3 | -8.8 | -5.9 | -1.4 | 8.3 |

| CG13239 | CG13239 | CG13239 | -3.3 | -5.8 | -4.3 | -1.3 | 8 |

| CG13082 | CG13082 | CG13082 | -2.9 | -2.7 | -2.5 | -1.1 | 9.3 |

| CG30458 | CG30458 | CG30458 | -2.9 | -6 | -1 | -2 | 5.7 |
| Protein                  | scpr-A | scpr-B | scpr-C | Unknown small peptide | 825-Oak /// CG32213 | 825-Oak /// CG32213 | 825-Oak /// CG32213 | 825-Oak /// CG32213 | 825-Oak /// CG32213 |
|-------------------------|--------|--------|--------|-----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| CG14566                 | CG14566| CG14566| CG14566|                       |                      |                      |                      |                      |                      |
| CG31606                 | CG31606| CG31606| CG31606|                       |                      |                      |                      |                      |                      |
| CG14456                 | CG14456| CG14456| CG14456|                       |                      |                      |                      |                      |                      |
| CG13046                 | CG13046| CG13046| CG13046|                       |                      |                      |                      |                      |                      |
| CG1499                  | CG1499 | CG1499 | CG1499 |                       |                      |                      |                      |                      |                      |
| CG2150                  | CG2150 | CG2150 | CG2150 |                       |                      |                      |                      |                      |                      |
| CG15225                 | CG15225| CG15225| CG15225|                       |                      |                      |                      |                      |                      |
| CG11585                 | CG11585| CG11585| CG11585|                       |                      |                      |                      |                      |                      |
| CG32512                 | CG32512| CG32512| CG32512|                       |                      |                      |                      |                      |                      |
| SCP-containing protein A /// B /// C | scpr-A /// scpr-B /// scpr-C | CG5207 | CG5207 |                       |                      |                      |                      |                      |                      |

**Unknown small peptide**

| Protein                  | scpr-A | scpr-B | scpr-C | Unknown small peptide | 825-Oak /// CG32213 | 825-Oak /// CG32213 | 825-Oak /// CG32213 | 825-Oak /// CG32213 | 825-Oak /// CG32213 |
|-------------------------|--------|--------|--------|-----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| CG14324                 | CG14324| CG14324| CG14324|                       |                      |                      |                      |                      |                      |
| CG17290                 | CG17290| CG17290| CG17290|                       |                      |                      |                      |                      |                      |
| CG13060                 | CG13060| CG13060| CG13060|                       |                      |                      |                      |                      |                      |
| CG30334                 | CG30334| CG30334| CG30334|                       |                      |                      |                      |                      |                      |
| CG13394 /// GA12253     | CG13394///DpseGA25454 | CG13394 | CG13394 |                       |                      |                      |                      |                      |                      |
| CG13277                 | CG13277| CG13277| CG13277|                       |                      |                      |                      |                      |                      |
| CG15213                 | CG15213| CG15213| CG15213|                       |                      |                      |                      |                      |                      |
| CG13069                 | CG13069| CG13069| CG13069|                       |                      |                      |                      |                      |                      |
| CG8012                  | CG8012 | CG8012 | CG8012 |                       |                      |                      |                      |                      |                      |
| CG14096                 | CG14096| CG14096| CG14096|                       |                      |                      |                      |                      |                      |
| CG34280                 | CG34280| CG34280| CG34280|                       |                      |                      |                      |                      |                      |
| CG34281                 | CG34281| CG34281| CG34281|                       |                      |                      |                      |                      |                      |
| CG13060                 | CG13060| CG13060| CG13060|                       |                      |                      |                      |                      |                      |
| CG8012                  | CG8012 | CG8012 | CG8012 |                       |                      |                      |                      |                      |                      |
| CG14096                 | CG14096| CG14096| CG14096|                       |                      |                      |                      |                      |                      |
| CG15213                 | CG15213| CG15213| CG15213|                       |                      |                      |                      |                      |                      |
| CG13069                 | CG13069| CG13069| CG13069|                       |                      |                      |                      |                      |                      |
| CG8012                  | CG8012 | CG8012 | CG8012 |                       |                      |                      |                      |                      |                      |
| CG14096                 | CG14096| CG14096| CG14096|                       |                      |                      |                      |                      |                      |
| CG34280                 | CG34280| CG34280| CG34280|                       |                      |                      |                      |                      |                      |
| CG34281                 | CG34281| CG34281| CG34281|                       |                      |                      |                      |                      |                      |
| CG8012                  | CG8012 | CG8012 | CG8012 |                       |                      |                      |                      |                      |                      |
| CG14096                 | CG14096| CG14096| CG14096|                       |                      |                      |                      |                      |                      |
| CG34280                 | CG34280| CG34280| CG34280|                       |                      |                      |                      |                      |                      |
| CG34281                 | CG34281| CG34281| CG34281|                       |                      |                      |                      |                      |                      |
| CG8012                  | CG8012 | CG8012 | CG8012 |                       |                      |                      |                      |                      |                      |
| CG14096                 | CG14096| CG14096| CG14096|                       |                      |                      |                      |                      |                      |
| CG34280                 | CG34280| CG34280| CG34280|                       |                      |                      |                      |                      |                      |
| CG34281                 | CG34281| CG34281| CG34281|                       |                      |                      |                      |                      |                      |
| CG8012                  | CG8012 | CG8012 | CG8012 |                       |                      |                      |                      |                      |                      |
| CG14096                 | CG14096| CG14096| CG14096|                       |                      |                      |                      |                      |                      |
| CG34280                 | CG34280| CG34280| CG34280|                       |                      |                      |                      |                      |                      |
| CG34281                 | CG34281| CG34281| CG34281|                       |                      |                      |                      |                      |                      |
| CG8012                  | CG8012 | CG8012 | CG8012 |                       |                      |                      |                      |                      |                      |
| CG14096                 | CG14096| CG14096| CG14096|                       |                      |                      |                      |                      |                      |
| CG34280                 | CG34280| CG34280| CG34280|                       |                      |                      |                      |                      |                      |
| CG34281                 | CG34281| CG34281| CG34281|                       |                      |                      |                      |                      |                      |
| CG8012                  | CG8012 | CG8012 | CG8012 |                       |                      |                      |                      |                      |                      |
| CG14096                 | CG14096| CG14096| CG14096|                       |                      |                      |                      |                      |                      |
| CG34280                 | CG34280| CG34280| CG34280|                       |                      |                      |                      |                      |                      |
| CG34281                 | CG34281| CG34281| CG34281|                       |                      |                      |                      |                      |                      |
| CG8012                  | CG8012 | CG8012 | CG8012 |                       |                      |                      |                      |                      |                      |
| CG14096                 | CG14096| CG14096| CG14096|                       |                      |                      |                      |                      |                      |

**Color Legend**

-2 < x < -6
-6 < x < -10

>2 > x > 4
>4 > x > 6
>6 > x > 8
>8 > x > 10