

Table S1. Immune-related Pattern Recognition Receptors from the transcriptome of two-spotted field crickets

No	Gene Sequence ID	Annotation description
1	TRINITY_DN87689_c0_g8_i1	<i>Apolipophorin</i>
2	TRINITY_DN90320_c4_g2_i2	<i>Apolipophorin-III</i>
3	TRINITY_DN83083_c0_g3_i1	<i>Apolipoprotein D</i>
4	TRINITY_DN87472_c0_g4_i2	<i>Apolipophorin III 1</i>
5	TRINITY_DN79329_c2_g3_i2	<i>ApolipophorinIII 3 isoform B</i>
6	TRINITY_DN87177_c0_g2_i15	<i>Ataxin-7-like protein 1</i>
7	TRINITY_DN69311_c0_g2_i1	<i>Ataxin-2-like protein</i>
8	TRINITY_DN79241_c0_g1_i1	<i>Beta-1,3-glucan-binding protein</i>
9	TRINITY_DN66389_c1_g1_i1	<i>C-type lectin 2</i>
10	TRINITY_DN80953_c0_g1_i1	<i>C-type lectin 13</i>
11	TRINITY_DN62874_c0_g2_i1	<i>Down syndrome cell adhesion molecule-like protein DSCAM2</i>
12	TRINITY_DN87557_c4_g2_i2	<i>Down syndrome cell adhesion molecule-like protein DSCAM2</i>
13	TRINITY_DN88698_c7_g1_i1	<i>Endoplasmic reticulum lectin 1</i>
14	TRINITY_DN81707_c0_g1_i3	<i>Galectin</i>
15	TRINITY_DN89270_c1_g1_i3	<i>Galectin</i>
16	TRINITY_DN87548_c0_g1_i1	<i>GNBP1</i>
17	TRINITY_DN88917_c0_g2_i5	<i>GNBP1</i>
18	TRINITY_DN36711_c0_g1_i1	<i>Hemolymph lipopolysaccharide-binding protein</i>
19	TRINITY_DN89574_c1_g2_i1	<i>Hemolymph lipopolysaccharide-binding protein</i>
20	TRINITY_DN84123_c0_g3_i2	<i>Hemolymph lipopolysaccharide-binding protein</i>
21	TRINITY_DN82224_c1_g1_i1	<i>Hemolymph lipopolysaccharide-binding protein</i>
22	TRINITY_DN74207_c0_g1_i1	<i>Hemolymph lipopolysaccharide-binding protein</i>
23	TRINITY_DN89591_c6_g3_i1	<i>Hemolymph juvenile hormone binding protein</i>
24	TRINITY_DN135327_c0_g1_i1	<i>Hemolymph lipopolysaccharide-binding protein</i>
25	TRINITY_DN84754_c0_g1_i1	<i>Hemolymph juvenile hormone binding protein</i>
26	TRINITY_DN86828_c2_g1_i2	<i>Hemolymph lipopolysaccharide-binding protein</i>
27	TRINITY_DN78311_c0_g1_i2	<i>Hemolymph lipopolysaccharide-binding protein</i>
28	TRINITY_DN81298_c1_g4_i1	<i>Hemolymph lipopolysaccharide-binding protein</i>
29	TRINITY_DN77376_c0_g1_i2	<i>Hemolymph lipopolysaccharide-binding protein</i>
30	TRINITY_DN86828_c1_g3_i1	<i>Hemolymph lipopolysaccharide-binding protein</i>
31	TRINITY_DN81584_c0_g1_i2	<i>Hemolymph lipopolysaccharide-binding protein</i>
32	TRINITY_DN129665_c0_g1_i1	<i>Hemolymph lipopolysaccharide-binding protein</i>
33	TRINITY_DN81273_c0_g10_i1	<i>Hemolymph lipopolysaccharide-binding protein</i>

34	TRINITY_DN86913_c0_g3_i2	<i>Hemolymph lipopolysaccharide-binding protein</i>
35	TRINITY_DN89840_c0_g1_i1	<i>Hemolymph lipopolysaccharide-binding protein</i>
36	TRINITY_DN40040_c0_g1_i1	<i>Hemolymph lipopolysaccharide-binding protein</i>
37	TRINITY_DN88441_c2_g1_i2	<i>Immulectin 9</i>
38	TRINITY_DN87890_c0_g1_i7	<i>Immulectin 5</i>
39	TRINITY_DN81407_c1_g1_i2	<i>Immulectin 11</i>
40	TRINITY_DN144682_c0_g1_i1	<i>Immulectin-2a</i>
41	TRINITY_DN87545_c2_g11_i1	<i>Immulectin 5</i>
42	TRINITY_DN84460_c2_g3_i2	<i>Immunolectin-A</i>
43	TRINITY_DN81721_c1_g1_i1	<i>Lectin-related protein</i>
44	TRINITY_DN81298_c0_g3_i1	<i>Lectin-related protein</i>
45	TRINITY_DN81584_c0_g2_i1	<i>Lectin-related protein (Fragment)</i>
46	TRINITY_DN83725_c2_g2_i1	<i>Peptidoglycan-recognition protein</i>
47	TRINITY_DN81082_c0_g1_i1	<i>Peptidoglycan-recognition protein LE-like Protein</i>
48	TRINITY_DN83462_c0_g1_i1	<i>Peptidoglycan-recognition protein 1</i>
49	TRINITY_DN80566_c0_g1_i1	<i>Regenectin</i>
50	TRINITY_DN14747_c0_g1_i1	<i>Regenectin</i>
51	TRINITY_DN87571_c3_g8_i3	<i>Regenectin</i>
52	TRINITY_DN160647_c0_g1_i1	<i>Putative scavenger receptor</i>
53	TRINITY_DN88582_c2_g1_i1	<i>Scavenger receptor class B member, putative</i>
54	TRINITY_DN85652_c0_g1_i1	<i>Scavenger receptor class B member 1</i>
55	TRINITY_DN87011_c0_g1_i1	<i>Scavenger receptor class B member 1</i>
56	TRINITY_DN84375_c5_g1_i1	<i>Scavenger receptor class B member 1-like</i>
57	TRINITY_DN74266_c0_g1_i1	<i>Septin</i>
58	TRINITY_DN89316_c1_g8_i2	<i>Spondin-1</i>
59	TRINITY_DN66908_c0_g2_i1	<i>Techylectin-5B</i>
60	TRINITY_DN81298_c2_g1_i1	<i>26-kDa lectin</i>
61	TRINITY_DN87545_c2_g16_i1	<i>26-kDa lectin</i>
62	TRINITY_DN86828_c1_g1_i1	<i>26-kDa lectin</i>

Table S2. Immune-related Signal Modulators from the transcriptome of two-spotted field crickets

No	Gene Sequence ID	Annotation description
1	TRINITY_DN90050_c0_g1_i1	<i>Allatotropin receptor</i>
2	TRINITY_DN82291_c1_g2_i1	<i>Allatostatin receptor</i>
3	TRINITY_DN85577_c0_g2_i1	<i>Angiotensin-1 receptor</i>
4	TRINITY_DN89599_c1_g2_i1	<i>Chymotrypsin</i>
5	TRINITY_DN82706_c2_g1_i1	<i>Chymotrypsin</i>
6	TRINITY_DN89257_c2_g11_i1	<i>Chymotrypsin</i>
7	TRINITY_DN81498_c0_g2_i1	<i>Chymotrypsin</i>
8	TRINITY_DN90501_c0_g2_i2	<i>Chymotrypsin 12</i>
9	TRINITY_DN83010_c1_g5_i1	<i>Chymotrypsin-like protein</i>
10	TRINITY_DN83662_c0_g1_i3	<i>Chymotrypsin BI</i>
11	TRINITY_DN102153_c0_g1_i1	<i>GHKL domain-containing protein</i>
12	TRINITY_DN83100_c0_g2_i1	<i>Kazal domain-containing peptide</i>
13	TRINITY_DN78176_c0_g1_i1	<i>Kazal domain-containing peptide</i>
14	TRINITY_DN146932_c0_g1_i1	<i>Kunitz-type protease inhibitor 4 isoform B</i>
15	TRINITY_DN133622_c0_g1_i1	<i>Porin</i>
16	TRINITY_DN86437_c8_g1_i2	<i>Prophenoloxidase</i>
17	TRINITY_DN86437_c7_g1_i1	<i>Prophenoloxidase</i>
18	TRINITY_DN63594_c0_g1_i2	<i>Phenoloxidase 2-like</i>
19	TRINITY_DN86437_c7_g2_i2	<i>Pro-phenoloxidase 1</i>
20	TRINITY_DN87219_c10_g1_i2	<i>Prostaglandin E synthase 2</i>
21	TRINITY_DN89738_c1_g7_i6	<i>Serine protease 1</i>
22	TRINITY_DN76928_c0_g1_i1	<i>Serine protease 3</i>
23	TRINITY_DN79060_c0_g2_i2	<i>Serine protease</i>
24	TRINITY_DN129705_c0_g1_i1	<i>Serine protease</i>
25	TRINITY_DN80081_c0_g1_i1	<i>Serine protease</i>
26	TRINITY_DN82393_c0_g1_i3	<i>Serine protease</i>
27	TRINITY_DN90709_c15_g1_i1	<i>Serine protease</i>
28	TRINITY_DN84137_c0_g2_i1	<i>Serine protease</i>
29	TRINITY_DN90709_c13_g5_i1	<i>Serine protease</i>
30	TRINITY_DN86192_c2_g15_i1	<i>Serine protease</i>
31	TRINITY_DN90709_c14_g1_i1	<i>Serine protease</i>
32	TRINITY_DN78833_c0_g1_i1	<i>Serine protease</i>
33	TRINITY_DN85446_c1_g3_i1	<i>Serine protease</i>
34	TRINITY_DN86838_c0_g11_i4	<i>Serine protease</i>
35	TRINITY_DN90326_c6_g5_i1	<i>Serine protease</i>

36	TRINITY_DN82387_c0_g1_i1	<i>Serine protease</i>
37	TRINITY_DN102626_c0_g1_i1	<i>Serine proteinase stubble</i>
38	TRINITY_DN87778_c0_g1_i2	<i>Serine protease gd</i>
39	TRINITY_DN87612_c0_g5_i2	<i>Serine protease P69</i>
40	TRINITY_DN88358_c0_g1_i1	<i>Serine protease 62</i>
41	TRINITY_DN88307_c1_g2_i3	<i>Serine protease 14</i>
42	TRINITY_DN39487_c0_g1_i1	<i>Serine protease 26</i>
43	TRINITY_DN167817_c0_g1_i1	<i>Serine protease, S9A family peptidase</i>
44	TRINITY_DN78414_c0_g1_i1	<i>Serine protease 38</i>
45	TRINITY_DN89946_c0_g3_i1	<i>Serpin</i>
46	TRINITY_DN85610_c1_g1_i3	<i>Serpin B4</i>
47	TRINITY_DN88860_c0_g1_i2	<i>Serpin I2</i>
48	TRINITY_DN88170_c1_g1_i1	<i>Serpin protein</i>
49	TRINITY_DN88170_c1_g3_i3	<i>Serpin 5</i>
50	TRINITY_DN90032_c1_g3_i3	<i>Serpin B8</i>
51	TRINITY_DN89804_c1_g2_i1	<i>Tetraspanin</i>
52	TRINITY_DN88187_c4_g2_i4	<i>Tetraspanin</i>
53	TRINITY_DN88045_c3_g1_i3	<i>Tetraspanin</i>
54	TRINITY_DN81053_c1_g1_i3	<i>Tetraspanin</i>
55	TRINITY_DN61731_c0_g1_i1	<i>Tetraspanin</i>
56	TRINITY_DN166583_c0_g1_i1	<i>Tetraspanin</i>
57	TRINITY_DN79958_c0_g2_i5	<i>Trypsin-like serine protease</i>

Table S3. Immune-related Signal Transducers from the transcriptome of two-spotted field crickets

No	Gene Sequence ID	Annotation description
1	TRINITY_DN79345_c0_g1_i3	<i>Adiponectin receptor protein</i>
2	TRINITY_DN84102_c0_g1_i2	<i>Allatostatin A prohormone</i>
3	TRINITY_DN91028_c20_g3_i3	<i>Ankyrin repeat and fibronectin type-III domain-containing protein 1</i>
4	TRINITY_DN85533_c1_g2_i1	<i>Angiomotin</i>
5	TRINITY_DN90655_c0_g2_i1	<i>Beta-arrestin2</i>
6	TRINITY_DN76807_c0_g2_i1	<i>Bursicon-beta</i>
7	TRINITY_DN66564_c0_g2_i1	<i>C2 domain-containing protein</i>
8	TRINITY_DN66503_c0_g1_i1	<i>C2 domain protein</i>
9	TRINITY_DN110565_c0_g1_i1	<i>C2 domain protein</i>
10	TRINITY_DN15032_c0_g1_i1	<i>CSN5 cop9 signalosome subunit 5</i>
11	TRINITY_DN85088_c1_g1_i8	<i>C-Jun-amino-terminal kinase-interacting protein 3</i>
12	TRINITY_DN49469_c0_g1_i1	<i>Calmodulin-domain protein kinase</i>
13	TRINITY_DN129478_c0_g1_i1	<i>Calmodulin putative</i>
14	TRINITY_DN80828_c0_g1_i14	<i>Cactin</i>
15	TRINITY_DN89760_c0_g1_i5	<i>Calmodulin</i>
16	TRINITY_DN88139_c1_g1_i4	<i>Calmodulin-binding transcription activator 1</i>
17	TRINITY_DN80518_c0_g1_i2	<i>Calmodulin-like protein 4</i>
18	TRINITY_DN110393_c0_g1_i1	<i>Calmodulin cam-206</i>
19	TRINITY_DN90586_c1_g1_i9	<i>Calpain 1</i>
20	TRINITY_DN83104_c1_g2_i2	<i>Calpain-A</i>
21	TRINITY_DN86114_c0_g2_i22	<i>Calpain-B</i>
22	TRINITY_DN84320_c3_g1_i4	<i>Calpain-7</i>
23	TRINITY_DN81402_c0_g1_i3	<i>Calpain-A</i>
24	TRINITY_DN165025_c0_g1_i1	<i>Calpain-7</i>
25	TRINITY_DN86876_c0_g2_i2	<i>Calpain-7-like protein</i>
26	TRINITY_DN86519_c2_g2_i2	<i>Calpain-1 catalytic subunit</i>
27	TRINITY_DN164900_c0_g1_i1	<i>Calpain family cysteine protease domain-containing protein</i>
28	TRINITY_DN87120_c3_g4_i13	<i>Catenin delta-2</i>
29	TRINITY_DN178203_c0_g1_i1	<i>Chimaerin</i>
30	TRINITY_DN81696_c0_g1_i1	<i>Contactin</i>
31	TRINITY_DN70953_c0_g2_i1	<i>COP9 signalosome complex subunit 3</i>
32	TRINITY_DN88541_c0_g7_i1	<i>COP9 signalosome complex subunit 4</i>
33	TRINITY_DN88946_c1_g3_i4	<i>COP9 signalosome complex subunit 5</i>
34	TRINITY_DN84795_c0_g1_i1	<i>COP9 signalosome complex subunit 6</i>
35	TRINITY_DN84947_c1_g1_i2	<i>COP9 signalosome complex subunit 7a</i>

36	TRINITY_DN83545_c1_g1_i3	<i>COP9 signalosome complex subunit 1</i>
37	TRINITY_DN81987_c0_g2_i2	<i>COP9 signalosome complex subunit 2</i>
38	TRINITY_DN79343_c0_g1_i1	<i>EF-hand domain-containing protein 1-like</i>
39	TRINITY_DN85586_c1_g7_i1	<i>EF-hand domain containing protein</i>
40	TRINITY_DN81079_c0_g1_i1	<i>EF-hand calcium-binding domain-containing protein 2</i>
41	TRINITY_DN15974_c0_g1_i1	<i>EF hand domain-containing protein, putative</i>
42	TRINITY_DN32770_c0_g1_i1	<i>EF hand domain-containing protein</i>
43	TRINITY_DN84200_c1_g2_i2	<i>EF-hand calcium-binding domain-containing protein 4B</i>
44	TRINITY_DN93947_c0_g1_i1	<i>EF hand domain-containing protein</i>
45	TRINITY_DN32770_c0_g2_i1	<i>EF hand domain-containing protein</i>
46	TRINITY_DN161113_c0_g1_i1	<i>EF hand domain-containing protein</i>
47	TRINITY_DN23059_c0_g1_i1	<i>EF hand domain-containing protein</i>
48	TRINITY_DN82619_c0_g1_i2	<i>EF-hand domain-containing family member C2</i>
49	TRINITY_DN78934_c0_g2_i1	<i>Folliculin</i>
50	TRINITY_DN87350_c4_g6_i4	<i>Four-and-a-half LIM domain protein 1 isoform B</i>
51	TRINITY_DN88862_c4_g7_i1	<i>Frizzled-7</i>
52	TRINITY_DN177906_c0_g1_i1	<i>Frizzled-10-B</i>
53	TRINITY_DN81654_c0_g1_i2	<i>Frizzled-related protein</i>
54	TRINITY_DN85257_c0_g2_i2	<i>Gamma-tubulin complex component</i>
55	TRINITY_DN79544_c0_g1_i1	<i>Hedgehog protein</i>
56	TRINITY_DN89592_c1_g3_i2	<i>Hippo</i>
57	TRINITY_DN84269_c7_g7_i1	<i>Hippocampus abundant transcript 1 protein</i>
58	TRINITY_DN90160_c6_g2_i2	<i>IMD-like protein</i>
59	TRINITY_DN89357_c0_g4_i1	<i>JNK-interacting protein 1</i>
60	TRINITY_DN81682_c0_g1_i2	<i>JNK-interacting protein 1</i>
61	TRINITY_DN81843_c0_g3_i1	<i>JNK1-associated membrane protein</i>
62	TRINITY_DN88444_c11_g1_i1	<i>Kruppel-like protein 1</i>
63	TRINITY_DN89472_c0_g3_i3	<i>Leucine-rich repeat-containing protein 68</i>
64	TRINITY_DN88837_c3_g7_i1	<i>Leucine-rich repeat and fibronectin type III domain-containing protein 1</i>
65	TRINITY_DN86086_c2_g2_i2	<i>Leucine-rich repeat-containing protein</i>
66	TRINITY_DN88614_c0_g4_i2	<i>Leucine-rich repeat-containing protein 57</i>
67	TRINITY_DN82320_c0_g1_i1	<i>Leucine-rich repeat protein soc-2</i>
68	TRINITY_DN80787_c0_g1_i1	<i>Malectin-B</i>
69	TRINITY_DN89144_c3_g2_i1	<i>NACHT and WD repeat domain-containing protein 1</i>
70	TRINITY_DN77145_c1_g1_i1	<i>NACHT and Ankyrin domain protein</i>
71	TRINITY_DN89726_c0_g15_i3	<i>Nesprin-1</i>

72	TRINITY_DN82120_c0_g1_i2	<i>Notch</i>
73	TRINITY_DN15896_c0_g1_i1	<i>Notch</i>
74	TRINITY_DN143739_c0_g1_i1	<i>Notch 1</i>
75	TRINITY_DN89037_c3_g2_i1	<i>Notch protein</i>
76	TRINITY_DN84036_c0_g1_i1	<i>Notch protein</i>
77	TRINITY_DN12748_c0_g2_i1	<i>Notch domain-containing protein</i>
78	TRINITY_DN63859_c0_g2_i1	<i>Nuclear cap-binding protein subunit 2</i>
79	TRINITY_DN113923_c0_g1_i1	<i>Octopamine receptor 1</i>
80	TRINITY_DN71072_c0_g2_i1	<i>Pelle</i>
81	TRINITY_DN117445_c0_g1_i1	<i>Protein kinase AKT, related</i>
82	TRINITY_DN81879_c1_g5_i1	<i>Rab11 family-interacting protein 1</i>
83	TRINITY_DN83448_c0_g2_i1	<i>Rab-like protein 3</i>
84	TRINITY_DN49201_c0_g2_i1	<i>Rab GDP dissociation inhibitor</i>
85	TRINITY_DN110705_c0_g1_i1	<i>Rab-GTPase-TBC domain protein</i>
86	TRINITY_DN93717_c0_g1_i1	<i>Ras-specific guanine nucleotide-releasing factor 2</i>
87	TRINITY_DN74295_c0_g1_i1	<i>Rab-GTPase-TBC domain protein</i>
88	TRINITY_DN49201_c0_g1_i1	<i>Rab GDP dissociation inhibitor</i>
89	TRINITY_DN115735_c0_g1_i1	<i>Rab11b</i>
90	TRINITY_DN129461_c0_g1_i1	<i>Rab GDP dissociation inhibitor</i>
91	TRINITY_DN77261_c0_g1_i2	<i>Rab-like protein 2A</i>
92	TRINITY_DN77455_c0_g3_i1	<i>Rab18-family small gtpase</i>
93	TRINITY_DN58433_c0_g1_i1	<i>Rab GDP dissociation inhibitor</i>
94	TRINITY_DN78860_c0_g1_i5	<i>Ras-related protein Rab-36</i>
95	TRINITY_DN77306_c0_g2_i1	<i>Ras-like protein family member 11B</i>
96	TRINITY_DN128808_c0_g1_i1	<i>Ras family protein</i>
97	TRINITY_DN90571_c3_g4_i3	<i>Ras-like GTP-binding protein Rho1</i>
98	TRINITY_DN5265_c0_g1_i1	<i>Ras-like protein 3</i>
99	TRINITY_DN84087_c2_g2_i6	<i>Ras-related protein Rab-27A</i>
100	TRINITY_DN78011_c0_g3_i1	<i>Ras GTPase-activating protein-binding protein 1-like isoform X1</i>
101	TRINITY_DN86370_c6_g1_i1	<i>Ras-like protein 2 protein</i>
102	TRINITY_DN81939_c0_g2_i1	<i>Ras association domain-containing protein 10</i>
103	TRINITY_DN77306_c0_g1_i1	<i>Ras-like protein family member 11B</i>
104	TRINITY_DN78011_c0_g2_i1	<i>Ras GTPase-activating protein-binding protein 1-like isoform X1</i>
105	TRINITY_DN60273_c0_g1_i1	<i>Ras small GTPase, putative</i>
106	TRINITY_DN70163_c0_g1_i3	<i>Ras-specific guanine nucleotide-releasing factor 2</i>
107	TRINITY_DN87176_c0_g1_i1	<i>Ras-associated and pleckstrin-like protein domains-containing protein 1</i>

108	TRINITY_DN87642_c1_g1_i11	<i>Ras GTPase-activating protein 1</i>
109	TRINITY_DN76002_c0_g1_i1	<i>Ras suppressor protein 1</i>
110	TRINITY_DN81692_c0_g1_i2	<i>Ras-related protein Rab-8A</i>
111	TRINITY_DN89075_c2_g4_i9	<i>Ras gtpase-activating protein isoform x1</i>
112	TRINITY_DN79802_c0_g1_i1	<i>Ras GTPase-activating protein 3</i>
113	TRINITY_DN81323_c1_g3_i1	<i>Relish</i>
114	TRINITY_DN80870_c0_g2_i2	<i>Renin receptor</i>
115	TRINITY_DN84598_c0_g1_i1	<i>Rho GTPase-activating protein 18</i>
116	TRINITY_DN90173_c1_g1_i1	<i>Rho-associated protein kinase 2</i>
117	TRINITY_DN87785_c1_g2_i1	<i>Rho GTPase-activating protein 17</i>
118	TRINITY_DN86960_c5_g3_i3	<i>Rho GTPase-activating protein 20</i>
119	TRINITY_DN80784_c0_g1_i1	<i>Rho GTPase-activating protein 12</i>
120	TRINITY_DN3965_c0_g1_i1	<i>Rho GTPase-activating protein 20</i>
121	TRINITY_DN89028_c1_g1_i10	<i>Roquin</i>
122	TRINITY_DN86150_c4_g5_i7	<i>Serine-protein kinase</i>
123	TRINITY_DN104362_c0_g1_i1	<i>Serine protein kinase RIO</i>
124	TRINITY_DN3140_c0_g2_i1	<i>Serine/threonine protein kinase</i>
125	TRINITY_DN86137_c7_g1_i13	<i>Serine/threonine-protein kinase ULK3</i>
126	TRINITY_DN84829_c0_g1_i1	<i>Serine/threonine-protein kinase receptor</i>
127	TRINITY_DN74470_c0_g2_i1	<i>Serine/threonine-protein phosphatase</i>
128	TRINITY_DN90497_c2_g3_i6	<i>Serine/threonine-protein kinase/endoribonuclease IRE2</i>
129	TRINITY_DN90556_c0_g1_i2	<i>Serine/threonine-protein kinase 36</i>
130	TRINITY_DN129044_c0_g1_i1	<i>Serine/threonine-protein phosphatase</i>
131	TRINITY_DN90593_c2_g3_i2	<i>serine/threonine-protein kinase Chk2 isoform X2</i>
132	TRINITY_DN83761_c1_g1_i2	<i>Serine/threonine-protein kinase D3</i>
133	TRINITY_DN18171_c0_g2_i1	<i>Serine/threonine-protein phosphatase</i>
134	TRINITY_DN99335_c0_g1_i1	<i>Serine/threonine transporter SstT</i>
135	TRINITY_DN86442_c0_g2_i2	<i>Serine/threonine-protein phosphatase</i>
136	TRINITY_DN168219_c0_g1_i1	<i>Serine/threonine protein kinase</i>
137	TRINITY_DN87983_c1_g1_i1	<i>Serine/threonine-protein phosphatase 6 regulatory ankyrin repeat subunit B</i>
138	TRINITY_DN84921_c0_g1_i1	<i>Serine/threonine-protein kinase TBK1</i>
139	TRINITY_DN85971_c4_g2_i1	<i>Serine/threonine-protein phosphatase 2A regulatory subunit B'' subunit alpha</i>
140	TRINITY_DN120489_c0_g1_i1	<i>Serine/threonine-protein kinase</i>
141	TRINITY_DN89738_c0_g3_i6	<i>Serine/threonine-protein kinase SBK1</i>
142	TRINITY_DN87101_c1_g5_i6	<i>Serine/threonine-protein kinase PRP4-like protein</i>

143	TRINITY_DN140017_c0_g1_i1	<i>Serine/threonine-protein kinase receptor</i>
144	TRINITY_DN87560_c2_g1_i3	<i>Serine/threonine-protein kinase Nek2</i>
145	TRINITY_DN85397_c0_g1_i1	<i>Serine/threonine-protein kinase PLK4</i>
146	TRINITY_DN90436_c1_g5_i3	<i>Serine/threonine-protein kinase wnk 1,3,4, putative</i>
147	TRINITY_DN84662_c4_g2_i7	<i>Serine/threonine-protein kinase SMG1</i>
148	TRINITY_DN79111_c0_g1_i1	<i>Signal transducing adapter molecule 1</i>
149	TRINITY_DN83589_c0_g2_i2	<i>Signal transducer and activator of transcription</i>
150	TRINITY_DN88650_c9_g2_i1	<i>Spaetzle</i>
151	TRINITY_DN83732_c1_g5_i1	<i>Striatin-3</i>
152	TRINITY_DN135560_c0_g1_i1	<i>TATA-box binding protein</i>
153	TRINITY_DN82116_c0_g1_i2	<i>Testis-specific serine/threonine-protein kinase 4</i>
154	TRINITY_DN77011_c0_g2_i1	<i>Toll</i>
155	TRINITY_DN81353_c0_g1_i1	<i>Toll</i>
156	TRINITY_DN88272_c3_g5_i1	<i>Toll-like receptor 4</i>
157	TRINITY_DN77931_c0_g1_i3	<i>Toll-like receptor</i>
158	TRINITY_DN84024_c2_g10_i1	<i>Toll-like receptor 8</i>
159	TRINITY_DN84024_c2_g5_i1	<i>Toll-like receptor 4</i>
160	TRINITY_DN84024_c2_g1_i3	<i>Toll-like receptor 4</i>
161	TRINITY_DN83352_c0_g1_i1	<i>Toll-interacting protein</i>
162	TRINITY_DN83805_c1_g5_i1	<i>Toll family protein 6</i>
163	TRINITY_DN149072_c0_g1_i1	<i>Toll-like receptor 4</i>
164	TRINITY_DN86923_c1_g1_i1	<i>Toll family protein 8</i>
165	TRINITY_DN77011_c0_g1_i1	<i>Toll-like receptor 1</i>
166	TRINITY_DN78593_c0_g1_i5	<i>Toll pathway, mitochondrial</i>
167	TRINITY_DN89445_c3_g1_i1	<i>Toll-like receptor 7</i>
168	TRINITY_DN86701_c2_g1_i5	<i>Toll family protein</i>
169	TRINITY_DN83044_c0_g1_i2	<i>Toll-like receptor 4</i>
170	TRINITY_DN89850_c4_g1_i1	<i>Transgelin</i>
171	TRINITY_DN84601_c0_g1_i1	<i>Transducin beta-like protein 2</i>
172	TRINITY_DN84168_c0_g11_i1	<i>Tubulin beta chain</i>
173	TRINITY_DN77120_c0_g1_i1	<i>Tubulin beta chain</i>
174	TRINITY_DN17472_c0_g2_i1	<i>Tubulin beta chain</i>
175	TRINITY_DN176160_c0_g1_i1	<i>Tubulin gamma chain</i>
176	TRINITY_DN90249_c0_g8_i1	<i>Tubulin beta chain</i>
177	TRINITY_DN89207_c2_g1_i1	<i>Tubulin beta chain</i>
178	TRINITY_DN84168_c0_g2_i1	<i>Tubulin beta chain</i>
179	TRINITY_DN79085_c0_g2_i6	<i>Tubulin alpha chain</i>

180	TRINITY_DN90249_c1_g5_i1	<i>Tubulin beta chain</i>
181	TRINITY_DN90255_c1_g17_i3	<i>Tubulin beta chain</i>
182	TRINITY_DN162710_c0_g1_i1	<i>Tubulin alpha chain</i>
183	TRINITY_DN187097_c0_g1_i1	<i>Tubulin beta chain</i>
184	TRINITY_DN90255_c2_g1_i1	<i>Tubulin beta-4 chain</i>
185	TRINITY_DN85145_c1_g8_i2	<i>Target of rapamycin complex 2 subunit MAPKAP1</i>
186	TRINITY_DN52654_c0_g1_i1	<i>Target of rapamycin complex subunit lst8</i>
187	TRINITY_DN167239_c0_g1_i1	<i>WD40 associated region in TFIIID subunit</i>
188	TRINITY_DN83976_c0_g3_i2	<i>WD repeat-containing protein 48</i>
189	TRINITY_DN71338_c0_g1_i1	<i>Wnt</i>
190	TRINITY_DN89225_c0_g1_i1	<i>Wnt</i>
191	TRINITY_DN86967_c0_g1_i1	<i>Wnt</i>
192	TRINITY_DN87582_c0_g1_i2	<i>Wnt</i>
193	TRINITY_DN109037_c0_g1_i1	<i>WW domain protein</i>
194	TRINITY_DN169912_c0_g1_i1	<i>WW domain protein</i>
195	TRINITY_DN90343_c4_g1_i1	<i>Zinc finger protein</i>
196	TRINITY_DN199998_c0_g1_i1	<i>Zinc finger</i>
197	TRINITY_DN85604_c0_g1_i2	<i>Zinc finger MYND domain-containing protein 11</i>
198	TRINITY_DN183519_c0_g1_i1	<i>Zinc finger MYM-type protein 1</i>
199	TRINITY_DN86312_c2_g1_i2	<i>Zinc finger RNA-binding protein</i>
200	TRINITY_DN40205_c0_g1_i1	<i>zinc finger MYM-type protein 1-like isoform X1</i>
201	TRINITY_DN84851_c1_g1_i4	<i>Zinc finger CCHC domain-containing protein 2</i>
202	TRINITY_DN86155_c1_g2_i1	<i>Zinc finger protein ZIC, putative</i>
203	TRINITY_DN57944_c0_g1_i1	<i>Zinc finger protein 549</i>
204	TRINITY_DN86727_c0_g1_i1	<i>Zinc finger MYND domain-containing protein 11</i>
205	TRINITY_DN87198_c3_g2_i7	<i>Zinc finger C2HC domain-containing protein 1C-like Protein</i>
206	TRINITY_DN82107_c1_g3_i2	<i>Zinc finger SWIM domain-containing protein 7</i>
207	TRINITY_DN84461_c0_g2_i1	<i>Zinc finger MYND domain-containing protein 11</i>
208	TRINITY_DN20640_c0_g1_i1	<i>14-3-3 family protein</i>
209	TRINITY_DN90246_c0_g1_i2	<i>14-3-3 protein 1</i>
210	TRINITY_DN5987_c0_g1_i1	<i>14-3-3 protein epsilon</i>
211	TRINITY_DN45288_c0_g1_i1	<i>14-3-3 protein epsilon</i>
212	TRINITY_DN88819_c0_g9_i2	<i>14-3-3zeta_1 protein</i>
213	TRINITY_DN78767_c0_g2_i1	<i>14-3-3 protein epsilon</i>
214	TRINITY_DN405_c0_g1_i1	<i>14-3-3 family protein</i>

Table S4. Immune-related Effectors from the transcriptome of two-spotted field crickets

No	Gene Sequence ID	Annotation description
1	TRINITY_DN89440_c1_g2_i1	<i>Attacin</i>
2	TRINITY_DN165858_c0_g1_i1	<i>Bacteriocin</i>
3	TRINITY_DN69837_c0_g2_i1	<i>Carboxypeptidase</i>
4	TRINITY_DN86792_c2_g17_i1	<i>Carboxypeptidase</i>
5	RINITY_DN86792_c2_g10_i1	<i>Carboxypeptidase 3</i>
6	TRINITY_DN82454_c0_g1_i1	<i>Carboxypeptidase 4</i>
7	TRINITY_DN85268_c4_g6_i1	<i>Carboxypeptidase B-like</i>
8	TRINITY_DN88735_c2_g2_i4	<i>Carboxypeptidase E</i>
9	TRINITY_DN87822_c2_g3_i3	<i>Carboxypeptidase M</i>
10	TRINITY_DN201489_c0_g1_i1	<i>Carboxypeptidase yscS</i>
11	TRINITY_DN89787_c1_g9_i1	<i>Zinc carboxypeptidase</i>
12	TRINITY_DN88701_c6_g7_i1	<i>Zinc carboxypeptidase A 1</i>
13	TRINITY_DN195416_c0_g1_i1	<i>Serine-type D-Ala-D-Ala carboxypeptidase</i>
14	TRINITY_DN89725_c1_g1_i7	<i>Cathepsin 5</i>
15	TRINITY_DN86640_c0_g1_i2	<i>Cathepsin L-like protein</i>
16	TRINITY_DN84880_c3_g1_i6	<i>Cathepsin 4</i>
17	TRINITY_DN18659_c0_g1_i1	<i>Cathepsin B2</i>
18	TRINITY_DN146289_c0_g1_i1	<i>Cadherin-89D</i>
19	TRINITY_DN60654_c0_g1_i1	<i>Cathepsin L-like cysteine protease</i>
20	TRINITY_DN128294_c0_g1_i1	<i>Cathepsin L-like cysteine protease</i>
21	TRINITY_DN86630_c4_g2_i4	<i>Caspase-1 isoform X1</i>
22	TRINITY_DN83280_c0_g1_i1	<i>Caspase-1</i>
23	TRINITY_DN88257_c3_g6_i2	<i>Caspase-8</i>
24	TRINITY_DN85092_c0_g1_i2	<i>Caspase-8</i>
25	TRINITY_DN84211_c0_g1_i2	<i>Caspase-1</i>
26	TRINITY_DN83904_c0_g3_i4	<i>Caspase-1</i>
27	TRINITY_DN111239_c0_g1_i1	<i>Metacaspase</i>
28	TRINITY_DN163248_c0_g1_i1	<i>Lysozyme</i>
29	TRINITY_DN35342_c0_g1_i1	<i>Lysozyme</i>
30	TRINITY_DN156575_c0_g1_i1	<i>Lysozyme</i>
31	TRINITY_DN75097_c0_g1_i1	<i>C-type lysozyme</i>
32	TRINITY_DN88762_c0_g6_i1	<i>I-type lysozyme 1</i>
33	TRINITY_DN89187_c1_g12_i1	<i>I-type lysozyme</i>
34	TRINITY_DN88762_c0_g5_i1	<i>I-type lysozyme 1</i>
35	TRINITY_DN151148_c0_g1_i1	<i>Pyocin</i>

33	TRINITY_DN90574_c1_g1_i2	<i>Gephyrin</i>
34	TRINITY_DN81569_c0_g1_i3	<i>GILT-like protein C02D5.2</i>
35	TRINITY_DN88839_c1_g6_i2	<i>Heat shock protein 90</i>
36	TRINITY_DN74518_c0_g3_i2	<i>Heat shock 70 kDa protein cognate 2</i>
37	TRINITY_DN57888_c0_g1_i1	<i>Heat shock protein 70</i>
38	TRINITY_DN86611_c1_g3_i1	<i>60 kDa heat shock protein, mitochondrial</i>
39	TRINITY_DN88523_c2_g1_i2	<i>Heat shock 70 kDa protein 14</i>
40	TRINITY_DN86383_c0_g5_i3	<i>Heat shock 70 kDa protein 12A</i>
41	TRINITY_DN183465_c0_g1_i1	<i>Heat shock protein HSP60</i>
42	TRINITY_DN93491_c0_g1_i1	<i>Activator of Hsp90 ATPase-like protein</i>
43	TRINITY_DN90054_c2_g3_i1	<i>Heat shock 70 kDa protein cognate 4</i>
44	TRINITY_DN81618_c1_g2_i4	<i>Heat shock cognate 70 kDa protein</i>
45	TRINITY_DN114931_c0_g1_i1	<i>HSP90</i>
46	TRINITY_DN121344_c0_g1_i1	<i>Hsp78p</i>
47	TRINITY_DN72897_c0_g4_i1	<i>Heat shock protein 70</i>
48	TRINITY_DN176147_c0_g1_i1	<i>Heat shock protein 90</i>
49	TRINITY_DN26383_c0_g2_i1	<i>Heat shock protein SSC1, mitochondrial</i>
50	TRINITY_DN68944_c0_g1_i1	<i>Heat shock protein beta-11</i>
51	TRINITY_DN57888_c1_g1_i1	<i>Heat shock protein SSA1</i>
52	TRINITY_DN157740_c0_g1_i1	<i>HSP70 family</i>
53	TRINITY_DN82806_c0_g1_i1	<i>Heat shock protein 70</i>
54	TRINITY_DN89622_c0_g3_i2	<i>Heat shock 70 kDa protein 4L</i>
55	TRINITY_DN183471_c0_g1_i1	<i>Heat shock protein 70</i>
56	TRINITY_DN85656_c0_g2_i3	<i>Heat shock 70 kDa protein cognate</i>
57	TRINITY_DN105459_c0_g1_i1	<i>HSP90-domain-containing protein</i>
58	TRINITY_DN171774_c0_g1_i1	<i>Heat shock protein 60</i>
59	TRINITY_DN89864_c3_g3_i4	<i>Heat shock protein 67B2</i>
60	TRINITY_DN146233_c0_g1_i1	<i>Heat shock protein</i>
61	TRINITY_DN134020_c0_g1_i1	<i>Heat shock protein 90</i>
62	TRINITY_DN43371_c0_g1_i1	<i>Heat shock protein</i>
63	TRINITY_DN87035_c1_g1_i1	<i>Heat shock factor 2-binding protein</i>
64	TRINITY_DN88273_c5_g1_i3	<i>Heat shock protein 20.7</i>
65	TRINITY_DN130555_c0_g1_i1	<i>Heat shock protein 70</i>
66	TRINITY_DN89516_c0_g2_i1	<i>Heat shock 70 kDa protein cognate 2</i>
67	TRINITY_DN72897_c0_g2_i1	<i>Heat shock protein 70</i>
68	TRINITY_DN90054_c2_g1_i1	<i>Heat shock 70 kDa protein cognate 4</i>
69	TRINITY_DN153276_c0_g1_i1	<i>Heat shock protein 70, putative</i>

70	TRINITY_DN91591_c0_g1_i1	<i>Heat shock protein 70</i>
71	TRINITY_DN200570_c0_g1_i1	<i>30 kDa heat shock protein</i>
72	TRINITY_DN72897_c0_g1_i1	<i>Heat shock protein HSP70</i>
73	TRINITY_DN90349_c6_g1_i1	<i>Heat shock cognate 70 protein</i>
74	TRINITY_DN67048_c0_g1_i1	<i>Heat shock protein 40</i>
75	TRINITY_DN40795_c0_g1_i1	<i>Heat shock 70 kDa protein, putative</i>
76	TRINITY_DN68944_c0_g2_i1	<i>Heat shock protein beta-11</i>
77	TRINITY_DN74471_c0_g1_i1	<i>Heat shock protein SSB1</i>
78	TRINITY_DN79478_c0_g4_i1	<i>Heat shock protein 90</i>
79	TRINITY_DN139926_c0_g1_i1	<i>Heat shock protein 70</i>
80	TRINITY_DN177381_c0_g1_i1	<i>Heat shock protein 70</i>
81	TRINITY_DN89516_c0_g3_i1	<i>Heat shock protein 70</i>
82	TRINITY_DN83196_c0_g1_i2	<i>Heat shock protein 75 kDa, mitochondrial</i>
83	TRINITY_DN101475_c0_g1_i1	<i>Heat shock 70 cb</i>
84	TRINITY_DN66009_c0_g2_i1	<i>Hemicentin 1</i>
85	TRINITY_DN89286_c0_g1_i4	<i>Hemicentin-1-like protein</i>
86	TRINITY_DN89286_c0_g4_i1	<i>Hemicentin-1 (Fragment)</i>
87	TRINITY_DN90764_c0_g1_i8	<i>Heparanase</i>
88	TRINITY_DN86745_c0_g1_i2	<i>Hexamerin 1</i>
89	TRINITY_DN86745_c0_g2_i1	<i>Hexamerin 1</i>
90	TRINITY_DN88109_c4_g4_i1	<i>Iporin</i>
91	TRINITY_DN58810_c0_g1_i1	<i>Lustrin variant 1</i>
92	TRINITY_DN85628_c0_g3_i1	<i>Lustrin A</i>
93	TRINITY_DN70585_c0_g2_i1	<i>Opticin</i>
94	TRINITY_DN82884_c0_g1_i6	<i>Melanization protease 1</i>
95	TRINITY_DN62055_c0_g1_i2	<i>Natterin-3</i>
96	TRINITY_DN77329_c2_g3_i1	<i>Neprilysin-11</i>
97	TRINITY_DN77329_c2_g2_i1	<i>Neprilysin-11</i>
98	TRINITY_DN90456_c0_g1_i1	<i>Netrin receptor UNC5C</i>
99	TRINITY_DN89260_c2_g4_i4	<i>Neurocalcin</i>
100	TRINITY_DN87371_c1_g2_i2	<i>Ninjurin-2 isoform X1</i>
101	TRINITY_DN195667_c0_g1_i1	<i>Optineurin</i>
102	TRINITY_DN97825_c0_g1_i1	<i>Patatin-like phospholipase family protein</i>
103	TRINITY_DN85093_c0_g1_i5	<i>Patatin-like phospholipase domain-containing protein 2</i>
104	TRINITY_DN92660_c0_g1_i1	<i>Phosducin</i>
105	TRINITY_DN68809_c0_g1_i1	<i>Plexin-A4</i>
106	TRINITY_DN88784_c0_g1_i12	<i>Presenilin</i>

107	TRINITY_DN90241_c0_g4_i1	<i>Pumilio domain-containing protein C14orf21</i>
108	TRINITY_DN87015_c3_g1_i1	<i>Regucalcin</i>
109	TRINITY_DN85569_c0_g2_i1	<i>Regucalcin</i>
110	TRINITY_DN83849_c0_g1_i1	<i>Regucalcin</i>
111	TRINITY_DN86515_c4_g2_i2	<i>Snare protein syntaxin 1</i>
112	TRINITY_DN88343_c0_g2_i4	<i>Semaphorin-1A</i>
113	TRINITY_DN86843_c0_g1_i5	<i>Semaphorin 2a</i>
114	RINITY_DN83539_c0_g1_i1	<i>Semaphorin 1a</i>
115	TRINITY_DN87102_c0_g1_i3	<i>Syndecan</i>
116	TRINITY_DN83808_c2_g3_i1	<i>Stathmin</i>
117	TRINITY_DN87541_c1_g1_i1	<i>Syntaxin-17</i>
118	TRINITY_DN89678_c2_g1_i1	<i>Syntaxin-12</i>
119	TRINITY_DN92370_c0_g1_i1	<i>Syntaxin</i>
120	TRINITY_DN83951_c1_g1_i1	<i>Syntaxin-16</i>
121	TRINITY_DN84801_c0_g4_i1	<i>Syntaxin-6</i>
122	TRINITY_DN166047_c0_g1_i1	<i>Toxin-antitoxin system YwqK family antitoxin</i>
123	TRINITY_DN86439_c1_g1_i1	<i>Torso-like protein</i>
