Table S7. Detailed information of DEGs involved in immune pathways in AcCK1 vs AcT1 comparison group.

Gene ID	FPKM in AcCK1	FPKM in AcCK2	Log_2(Fold change)	*p* value	Nr annotation
TCONS_00002051	33.74	13.30666667	-1.34231	0.005845	Calnexin isoform X3
TCONS_00003832	2.39666667	0.001	-11.2268	0.048868	Calreticulin
TCONS_00003833	113.57	41.62666667	-1.448	0.000502	Calreticulin
TCONS_00009137	2.28666667	0.001	-11.159	0.016938	Lysosomal aspartic protease-like
TCONS_00010842	1.37333333	0.001	-10.4235	0.013718	E3 ubiquitin-protein ligase Nedd-4 isoform X3
TCONS_00024423	0.62	0.001	-9.27612	0.006014	Inositol 1,4,5-trisphosphate receptor isoform X5
TCONS_00024425	0.001	0.66	9.366322	0.022997	Inositol 1,4,5-trisphosphate receptor isoform X7
TCONS_00033114	0.001	2.043333333	10.99671	0.015923	V-type proton atpase subunit H isoform X3
TCONS_00033883	1.91666667	0.001	-10.9044	0.014938	V-type proton atpase 116 kda subunit a isoform 1-like isoform X5
TCONS_00037165	0.83666667	0.001	-9.70851	0.028903	Ubiquitin carboxyl-terminal hydrolase 8-like isoform X3
TCONS_00037844	1.33666667	0.001	-10.3844	0.023167	V-type proton atpase catalytic subunit A
TCONS_00042144	0.001	3.6	11.81378	0.004067	Ubiquitin-conjugating enzyme E2 W-like
XM_017048437.1	17.8933333	38.01666667	1.08721	0.031943	Stress-activated protein kinase JNK-like
XM_017048503.1	0.001	1.513333333	10.56351	0.045198	Autophagy protein 12-like isoform X2
XM_017048639.1	3687.38667	1642.233333	-1.16694	0.000298	LOW QUALITY PROTEIN: lysosomal aspartic protease
XM_017048969.1	2.84	0.001	-11.4717	7.09E-06	AP-3 complex subunit beta-2
XM_017049948.1	25.02	10.47	-1.25682	0.003818	Ubiquitin-protein ligase E3A isoform X1
XM_017050293.1	5.2	0.001	-12.3443	0.006458	E3 ubiquitin-protein ligase CBL
XM_017050546.1	0.001	0.866666667	9.759333	0.040336	E3 ubiquitin-protein ligase TRIM37-like isoform X5
XM_017050556.1	25.5633333	10.98	-1.2192	0.018156	Ribosomal protein S6 kinase beta-1-like
XM_017050602.1	1310.72667	2990.593333	1.190065	0.000229	Tubulin beta-1 chain
XM_017051376.1	18.32	8.94	-1.03507	0.017749	DNA damage-binding protein 1
XM_017051446.1	35.0366667	11.01333333	-1.66961	0.027002	E3 ubiquitin-protein ligase synoviolin A isoform X2
XM_017052301.1	0.01666667	1.026666667	5.944858	0.018509	Adenylate cyclase type 3 isoform X1
XM_017052351.1	9.66	0.001	-13.2378	4.92E-10	Integrin beta-nu-like isoform X1
XM_017052873.1	1.22333333	0.001	-10.2566	0.04281	Protein kinase C isoform X2
XM_017053315.1	105.6	49.81666667	-1.08391	0.001722	Prosaposin

XM_017053584.1	13.7133333	3.38	-2.02048	0.000785	Ubiquitin conjugation factor E4 B isoform X1
XM_017053609.1	0.001	3.54	11.78953	0.03796	Syntaxin-18
XM_017053778.1	0.001	1.776666667	10.79496	0.033052	Actin-related protein 2/3 complex subunit 4
XM_017054003.1	8.42333333	2.746666667	-1.61671	0.047938	Lysosomal alpha-mannosidase isoform X1
XM_017055025.1	12.7266667	6.143333333	-1.05076	0.02031	E3 ubiquitin-protein ligase HUWE1 isoform X2
XM_017055155.1	23.31	11.39	-1.03318	0.038591	AP-1 complex subunit beta-1 isoform X2
XM_017056666.1	39.04	12.81	-1.60768	9.83E-05	Cysteine proteinase
XM_017056967.1	12.71	5.39	-1.23761	0.042383	E3 ubiquitin-protein ligase RFWD2-like isoform X1
XM_017057010.1	0.001	1.93	10.91439	0.017463	Ubiquitin conjugation factor E4 A
XM_017057014.1	0.001	1.846666667	10.85071	0.030686	Rho-related BTB domain-containing protein 1 isoform X1
XM_017057861.1	1.95666667	0.001	-10.9342	0.001713	(E3-independent) E2 ubiquitin-conjugating enzyme UBE2O
XM_017058072.1	11.27	4.67	-1.27099	0.043461	Hepatocyte growth factor-regulated tyrosine kinase substrate
XM_017058134.1	42.56	20.78333333	-1.03407	0.008534	Cullin-2-like isoform X1
XM_017058856.1	3.58	0.001	-11.8057	0.000114	V-type proton atpase subunit H isoform X3
XM_017058995.1	155.673333	331.4033333	1.090066	0.012602	PV-type proton atpase 116 kda subunit a-like isoform X2
XM_017059203.1	1.74333333	0.001	-10.7676	0.000383	Hamartin-like isoform X2
XM_017059808.1	16.2	6.01	-1.43056	0.02703	Beta-galactosidase-like
XM_017060804.1	25.59	10.29	-1.31434	0.010672	Cystinosin homolog isoform X1
XM_017062025.1	0.00666667	2.066666667	8.276124	0.045591	Major facilitator superfamily domain-containing protein 8 isoform X1
XM_017062834.1	4.82	0.001	-12.2348	0.004217	Ubiquitin-like modifier-activating enzyme atg7 isoform X1
XM_017062838.1	0.92666667	0.001	-9.85591	0.034219	Kelch-like ECH-associated protein 1
XM_017063843.1	50.84	20.65666667	-1.29936	0.002389	5'-AMP-activated protein kinase catalytic subunit alpha-2
XM_017064466.1	197.023333	410.3666667	1.058547	0.001751	Armadillo segment polarity protein isoform X1
XM_017065549.1	25.45	12.51666667	-1.02382	0.047317	Heparan-alpha-glucosaminide N-acetyltransferase-like isoform X2
XM_017066377.1	8.82	2.456666667	-1.84408	0.003262	Dentin sialophosphoprotein-like
XM_017067316.1	0.13333333	2.816666667	4.400879	0.040002	Arrestin red cell isoform X2
TCONS_00020633	2.756667	0.001	-11.4287	0.012565	Rotein E(sev)2B [Acromyrmex echinatior]
TCONS_00028590	1.64	0.001	-10.6795	0.000971	Tyrosine-protein kinase hopscotch-like isoform X5

TCONS_00032598	1.423333	0.001	-10.4751	0.00199	Protein son of sevenless isoform X1
TCONS_00044406	0.506667	0.001	-8.98489	0.001626	Proto-oncogene tyrosine-protein kinase ROS-like isoform X3
TCONS_00045707	30.64333	77.62667	1.340979	0.007133	Insulin-like receptor-like isoform X1
XM_017049336.1	0.001	0.913333	9.834998	0.02168	ETS-like protein pointed isoform X1
XM_017053789.1	20.42333	7.586667	-1.42868	0.00364	Protein eiger isoform X2
XM_017054615.1	16.20667	6.813333	-1.25015	0.039636	Ribosomal protein S6 kinase 2 beta isoform X1
XM_017058556.1	1.243333	0.001	-10.28	0.021786	Protein son of sevenless
XM_017058570.1	306.57	153.05	-1.00221	0.003022	Calmodulin [Daphnia magna]
XM_017059559.1	0.001	1.4	10.45121	0.0415	Ras gtpase-activating protein 3 isoform X1
XM_017060727.1	1.82	0.001	-10.8297	0.006208	Tyrosine-protein phosphatase corkscrew-like isoform X1
XM_017064111.1	0.001	0.263333	8.040746	0.042733	Proto-oncogene tyrosine-protein kinase ROS isoform X3
TCONS_00009654	14.74667	6.973333	-1.08047	0.032123	Endophilin-A isoform X14
TCONS_00017038	17.59667	8.65	-1.02453	0.015064	Golgi-specific brefeldin A-resistance guanine nucleotide exchange factor 1-like
TCONS_00021472	2.673333	0.001	-11.3844	0.01466	Actin-related protein 2/3 complex subunit 4
TCONS_00024123	3.886667	0.316667	-3.6175	0.039663	F-actin-capping protein subunit alpha-like
XM_017048906.1	13.51	3.9	-1.79248	0.001651	Atypical protein kinase C-like
XM_017050636.1	10.85	4.21	-1.3658	0.032246	Partitioning defective 3 homolog
XM_017052300.1	0.846667	0.001	-9.72565	0.00036	Adenylate cyclase type 3 isoform X2
XM_017053768.1	1	0.001	-9.96578	0.007915	Zinc finger FYVE domain-containing protein 16 isoform X2
XM_017055181.1	7.866667	2.606667	-1.59355	0.034012	Phospholipase D2 isoform X1
XM_017056561.1	1.003333	0.001	-9.97059	0.031852	Adenylate cyclase type 9 isoform X1
XM_017057633.1	7.313333	3.046667	-1.2633	0.038971	WASH complex subunit FAM21
XM_017058570.1	306.57	153.05	-1.00221	0.003022	Calmodulin
XM_017059262.1	11.49667	2.473333	-2.21669	0.001349	Epidermal growth factor receptor substrate 15-like 1 isoform X2
XM_017060387.1	35.40333	13.25333	-1.41753	0.003262	Stromal membrane-associated protein 1