

Table S1. List of TaqMan assays used for RT-qPCR analysis using Quant Studio

™ 12K Flex Real-Time PCR System.

PANEL 1.

| Nº | Assay ID | GEN | NOMBRE DEL GEN | GRUPO |
|----|---------------|----------|--|----------------------------------|
| 1 | Mm00437762_m1 | B2m | beta-2 microglobulin | Endogenous gene expression |
| 2 | Mm00446968_m1 | Hprt | hypoxanthine guanine phosphoribosyl transferase | |
| 3 | Mm00435617_m1 | Pgk1 | phosphoglycerate kinase 1 | |
| 4 | Mm01277042_m1 | Tbp | TATA box binding protein | |
| 5 | Mm01201237_m1 | Ubc | ubiquitin C | |
| 6 | Mm01722325_m1 | Ywhaz | tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta polypeptide | |
| 7 | Mm00599890_m1 | Ifngr1 | interferon gamma receptor 1 | Cytokines and cytokine receptors |
| 8 | Mm00492626_m1 | Ifngr2 | interferon gamma receptor 2 | |
| 9 | Mm01168134_m1 | Ifng | interferon gamma | |
| 10 | Mm01178820_m1 | Tgfb1 | transforming growth factor, beta 1 | |
| 11 | Mm00436955_m1 | Tgfb2 | transforming growth factor, beta 2 | |
| 12 | Mm00436964_m1 | Tgfb1 | transforming growth factor, beta receptor I | |
| 13 | Mm00436977_m1 | Tgfb2 | transforming growth factor, beta receptor II | |
| 14 | Mm00443258_m1 | Tnf | tumor necrosis factor | |
| 15 | Mm00441875_m1 | Tnfrsf1a | tumor necrosis factor receptor superfamily, member 1a | |
| 16 | Mm00441889_m1 | Tnfrsf1b | tumor necrosis factor receptor superfamily, member 1b | |
| 17 | Mm01288580_m1 | Irf1 | interferon regulatory factor 1 | |
| 18 | Mm004967_m1 | Irf5 | interferon regulatory factor 5 | |
| 19 | Mm00516788_m1 | Irf7 | interferon regulatory factor 7 | |
| 20 | Mm01224532_m1 | Irg1 | immunoresponsive gene 1 | |

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|----|---------------|---------|-------------------------------------|--|
| 21 | Mm00518984_m1 | Il23a | interleukin 23, alpha subunit p19 | Interleukines and interleukin receptors |
| 22 | Mm00434237_m1 | Il1r1 | interleukin 1 receptor, type I | |
| 23 | Mm00439614_m1 | Il10 | interleukin 10 | |
| 24 | Mm00434157_m1 | Il10rb | interleukin 10 receptor, beta | |
| 25 | Mm00434169_m1 | Il12a | interleukin 12a | |
| 26 | Mm00434174_m1 | Il12b | interleukin 12b | |
| 27 | Mm00434189_m1 | Il12rb1 | interleukin 12 receptor, beta 1 | |
| 28 | Mm00434200_m1 | Il12rb2 | interleukin 12 receptor, beta 2 | |
| 29 | Mm00434204_m1 | Il13 | interleukin 13 | |
| 30 | Mm00439618_m1 | Il17a | interleukin 17A | |
| 31 | Mm00521423_m1 | Il17f | interleukin 17F | |
| 32 | Mm00434214_m1 | Il17ra | interleukin 17 receptor A | |
| 33 | Mm00434226_m1 | Il18 | interleukin 18 | |
| 34 | Mm00456733_m1 | Il18bp | interleukin 18 binding protein | |
| 35 | Mm00439620_m1 | Il1a | interleukin 1 alpha | |
| 36 | Mm00434228_m1 | Il1b | interleukin 1 beta | |
| 37 | Mm00446186_m1 | Il1rn | interleukin 1 receptor antagonist | |
| 38 | Mm00434256_m1 | Il2 | interleukin 2 | |
| 39 | Mm00517640_m1 | Il21 | interleukin 21 | |
| 40 | Mm00600317_m1 | Il21r | interleukin 21 receptor | |
| 41 | Mm01192969_m1 | Il22ra2 | interleukin 22 receptor, alpha 2 | |
| 42 | Mm00519943_m1 | Il23r | interleukin 23 receptor | |
| 43 | Mm00461162_m1 | Il27 | interleukin 27 | |
| 44 | Mm00497259_m1 | Il27ra | interleukin 27 receptor, alpha | |
| 45 | Mm00442885_m1 | Il2rg | interleukin 2 receptor, gamma chain | |
| 46 | Mm00445259_m1 | Il4 | interleukin 4 | |
| 47 | Mm00439646_m1 | Il5 | interleukin 5 | |
| 48 | Mm00434284_m1 | Il5ra | interleukin 5 receptor, alpha | |

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|----|---------------|--------|---|--|
| 49 | Mm00446190_m1 | Il6 | interleukin 6 | |
| 50 | Mm00439653_m1 | Il6ra | interleukin 6 receptor, alpha | |
| 51 | Mm00439665_m1 | Il6st | interleukin 6 signal transducer | |
| 52 | Mm01290062_m1 | Csf2 | colony stimulating factor 2 (granulocyte-macrophage) | |
| 53 | Mm00655745_m1 | Csf2rb | colony stimulating factor 2 receptor, beta, low-affinity (granulocyte-macrophage) | |
| 54 | Mm00469294_m1 | Ebi3 | Epstein-Barr virus induced gene 3 | |
| 55 | Mm00475988_m1 | Arg1 | arginase, liver | |
| 56 | Mm00475162_m1 | Foxp3 | forkhead box P3 | |
| 57 | Mm00440338_m1 | Myd88 | myeloid differentiation primary response gene 88 | Enzymes, prostaglandins and adaptor proteins |
| 58 | Mm00440502_m1 | Nos2 | nitric oxide synthase 2, inducible | |
| 59 | Mm00479246_m1 | Nox4 | NADPH oxidase 4 | |
| 60 | Mm00478374_m1 | Ptgs2 | prostaglandin-endoperoxide synthase 2 | |
| 61 | Mm00439531_m1 | Stat1 | signal transducer and activator of transcription 1 | |
| 62 | Mm01219775_m1 | Stat3 | signal transducer and activator of transcription 3 | |
| 63 | Mm00448890_m1 | Stat4 | signal transducer and activator of transcription 4 | |
| 64 | Mm01160477_m1 | Stat6 | signal transducer and activator of transcription 6 | |
| 65 | Mm00477633_m1 | Bcl6 | B cell leukemia/lymphoma 6 | |
| 66 | Mm00492590_m1 | Ido1 | indoleamine 2,3-dioxygenase 1 | |
| 67 | Mm00500554_m1 | Mmp12 | matrix metalloproteinase 12 | |
| 68 | Mm00485054_m1 | Mmp14 | matrix metalloproteinase 14 (membrane-inserted) | |
| 69 | Mm00476361_m1 | Nfkb1 | nuclear factor of kappa light polypeptide gene enhancer in B cells 1, p105 | |
| 70 | Mm00479807_m1 | Nfkb2 | nuclear factor of kappa light polypeptide gene enhancer in B cells 2, p49/p100 | |
| 71 | Mm00450960_m1 | Tbx21 | T-box 21 | |
| 72 | Mm00441891_m1 | Cd40 | CD40 antigen | |
| 73 | Mm00441911_m1 | Cd40lg | CD40 ligand | |

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|-----|---------------|--------|---|---|
| 74 | Mm00711660_m1 | Cd80 | CD80 antigen | Costimulatory and cell adhesion molecules |
| 75 | Mm00444543_m1 | Cd86 | CD86 antigen | |
| 76 | Mm00486849_m1 | Ctla4 | cytotoxic T-lymphocyte-associated protein 4 | |
| 77 | Mm03048248_m1 | Cd274 | CD274 antigen | |
| 78 | Mm00516023_m1 | Icam1 | intercellular adhesion molecule 1 | |
| 79 | Mm00494862_m1 | Icam2 | intercellular adhesion molecule 2 | |
| 80 | Mm00497600_m1 | Icos | inducible T cell co-stimulator | |
| 81 | Mm00497237_m1 | Icosl | icos ligand | |
| 82 | Mm00434513_m1 | Itgb2 | integrin beta 2 | |
| 83 | Mm00486868_m1 | Cd83 | CD83 antigen | |
| 84 | Mm00493071_m1 | Lag3 | lymphocyte-activation gene 3 | |
| 85 | Mm01285676_m1 | Pdcd1 | programmed cell death 1 | |
| 86 | Mm00454540_m1 | Havcr2 | hepatitis A virus cellular receptor 2 | |
| 87 | Mm00441242_m1 | Ccl2 | chemokine (C-C motif) ligand 2 | Chemokines and chemokine receptors |
| 88 | Mm00441258_m1 | Ccl3 | chemokine (C-C motif) ligand 3 | |
| 89 | Mm00443111_m1 | Ccl4 | chemokine (C-C motif) ligand 4 | |
| 90 | Mm01302427_m1 | Ccl5 | chemokine (C-C motif) ligand 5 | |
| 91 | Mm00443113_m1 | Ccl7 | chemokine (C-C motif) ligand 7 | |
| 92 | Mm01216147_m1 | Ccr1 | chemokine (C-C motif) receptor 1 | |
| 93 | Mm01216173_m1 | Ccr2 | chemokine (C-C motif) receptor 2 | |
| 94 | Mm01216171_m1 | Ccr5 | chemokine (C-C motif) receptor 5 | |
| 95 | Mm01301785_m1 | Ccr7 | chemokine (C-C motif) receptor 7 | |
| 96 | Mm04207460_m1 | Cxcl1 | chemokine (C-X-C motif) ligand 1 | |
| 97 | Mm00445235_m1 | Cxcl10 | chemokine (C-X-C motif) ligand 10 | |
| 98 | Mm00436450_m1 | Cxcl2 | chemokine (C-X-C motif) ligand 2 | |
| 99 | Mm00434946_m1 | Cxcl9 | chemokine (C-X-C motif) ligand 9 | |
| 100 | Mm00438258_m1 | Cxcr2 | chemokine (C-X-C motif) receptor 2 | |
| 101 | Mm00438259_m1 | Cxcr3 | chemokine (C-X-C motif) receptor 3 | |

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|-----|---------------|--------|------------------------------------|---------------------|
| 102 | Mm00434772_m1 | Xcl1 | chemokine (C motif) ligand 1 | |
| 103 | Mm00441260_m1 | Ccl9 | chemokine (C-C motif) ligand 9 | |
| 104 | Mm00444533_m1 | Cxcl13 | chemokine (C-X-C motif) ligand 13 | |
| 105 | Mm00469712_m1 | Cxcl16 | chemokine (C-X-C motif) ligand 16 | |
| 106 | Mm01701838_m1 | Cxcl3 | chemokine (C-X-C motif) ligand 3 | |
| 107 | Mm00432086_m1 | Cxcr5 | chemokine (C-X-C motif) receptor 5 | |
| 108 | Mm00442346_m1 | Tlr2 | toll-like receptor 2 | Toll-like receptors |
| 109 | Mm01207404_m1 | Tlr3 | toll-like receptor 3 | |
| 110 | Mm00445273_m1 | Tlr4 | toll-like receptor 4 | |
| 111 | Mm00446590_m1 | Tlr7 | toll-like receptor 7 | |
| 112 | Mm00446193_m1 | Tlr9 | toll-like receptor 9 | |

PANEL 2.

| N° | Assay ID | GEN | NOMBRE DEL GEN | GRUPO |
|----|---------------|-----------------|--|----------------------------|
| 1 | Mm00437762_m1 | B2m | beta-2 microglobulin | Endogenous gene expression |
| 2 | Mm00446968_m1 | Hprt | hypoxanthine guanine phosphoribosyl transferase | |
| 3 | Mm01201237_m1 | Ubc | ubiquitin C | |
| 4 | Mm01331626_m1 | Akt1 | thymoma viral proto-oncogene 1 | MAPK signaling pathway |
| 5 | Mm01173094_m1 | Akt2 | thymoma viral proto-oncogene 2 | |
| 6 | Mm00442194_m1 | Akt3 | thymoma viral proto-oncogene 3 | |
| 7 | Mm01973540_g1 | Mapk3, Erk1 | mitogen-activated protein kinase 3 | |
| 8 | Mm00442479_m1 | Mapk1, Erk2 | mitogen-activated protein kinase 1 | |
| 9 | Mm00489514_m1 | Mapk8, Jnk | mitogen-activated protein kinase 8 | |
| 10 | Mm00444968_m1 | Mtor | mechanistic target of rapamycin (serine/threonine kinase) | |
| 11 | Mm01301009_m1 | Mapk14, P38mapk | mitogen-activated protein kinase 14 | |
| 12 | Mm01282781_m1 | Pik3r1, Pi3k | phosphatidylinositol 3-kinase, regulatory subunit, polypeptide 1 (p85 alpha) | |
| 13 | Mm00440940_m1 | Pparg | peroxisome proliferator activated receptor gamma | Lipid metabolism |
| 14 | Mm00443451_m1 | Nr1h3 | nuclear receptor subfamily 1, group H, member 3 | |
| 15 | Mm00447040_m1 | Pla2g4a | phospholipase A2, group IVA (cytosolic, calcium-dependent) | |
| 16 | Mm00447271_m1 | Ptgis | prostaglandin I2 (prostacyclin) synthase | |
| 17 | Mm00441185_m1 | Rxra | retinoid X receptor alpha | |
| 18 | Mm00436051_m1 | Ptger2, Ep | prostaglandin E receptor 2 (subtype EP2) | Prostaglandine synthesis |
| 19 | Mm00436053_m1 | Ptger4 | prostaglandin E receptor 4 (subtype EP4) | |
| 20 | Mm00452105_m1 | Ptges | prostaglandin E synthase | |
| 21 | Mm00460181_m1 | Ptges2 | prostaglandin E synthase 2(Ptges2) | |
| 22 | Mm01731378_g1 | Ptges3 | prostaglandin E synthase 3 (cytosolic) | |
| 23 | Mm00477214_m1 | Ptgs1 | prostaglandin-endoperoxide synthase 1 | |

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|----|---------------|---------------|---|-----------------------------------|
| 24 | Mm01199500_m1 | P2rx7 | purinergic receptor P2X, ligand-gated ion channel, 7 | |
| 25 | Mm00435472_m1 | P2ry2 | purinergic receptor P2Y, G-protein coupled 2 | |
| 26 | Mm00436055_m1 | Ptgfr | prostaglandin F receptor | |
| 27 | Mm00479846_m1 | Hpgds, Ptgds2 | intercellular adhesion molecule 1 | |
| 28 | Mm00482476_m1 | Ptgr1, Ltb4dh | prostaglandin reductase 1 | |
| 29 | Mm00521839_m1 | Ltb4r1, Blt1 | leukotriene B4 receptor 1 | |
| 30 | Mm01182747_m1 | Alox5 | arachidonate 5-lipoxygenase | |
| 31 | Mm00507789_m1 | Alox15 | arachidonate 15-lipoxygenase | |
| 32 | Mm00521826_m1 | Lta4h | leukotriene A4 hydrolase | |
| 33 | Mm00545833_m1 | Alox12 | arachidonate 12-lipoxygenase | |
| 34 | Mm00839636_g1 | Cd68 | CD68 antigen | Cholesterol pathway |
| 35 | Mm00432403_m1 | Cd36 | CD36 antigen | |
| 36 | Mm00459972_m1 | Cd209d | CD209d antigen | C-Type Lectin Receptors (CLRs) |
| 37 | Mm01183349_m1 | Clec7a | C-type lectin domain family 7, member a | |
| 38 | Mm01329362_m1 | Mrc1 | mannose receptor, C type 1 | |
| 39 | Mm01183378_m1 | Cd69 | CD69 antigen | |
| 40 | Mm00495182_m1 | Klrd1, Cd94 | killer cell lectin-like receptor, subfamily D, member 1 | |
| 41 | Mm00435587_m1 | Pfkfb1 | phosphofructokinase, liver, B-type | Carbohydrates synthesis |
| 42 | Mm00439344_m1 | Hk1 | hexokinase 2 | |
| 43 | Mm00443385_m1 | Hk2 | hematopoietic prostaglandin D synthase | |
| 44 | Mm00441480_m1 | Slc2a1 | solute carrier family 2 (facilitated glucose transporter), member 1 | |
| 45 | Mm00472712_m1 | Gys1 | granzyme B | |
| 46 | Mm00504650_m1 | Pfkfb3 | 6-phosphofructo-2-kinase/fructose-2,6-bisphosphatase 3 | |
| 47 | Mm00554300_m1 | Pdk1 | pyruvate dehydrogenase kinase, isoenzyme 1 | |
| 48 | Mm01268229_m1 | Pgm2 | phosphoglucomutase 2 | |
| 49 | Mm01612132_g1 | Ldha | lactate dehydrogenase A | |
| 50 | Mm00833691_g1 | Tpi1 | triosephosphate isomerase 1 | |
| 51 | Mm00434151_m1 | Il10ra | interleukin 10 receptor, beta | |

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|----|---------------|-------------|--|--|
| 52 | Mm00446726_m1 | Il13ra1 | interleukin 13 receptor, alpha 2 | Interleukines and interleukin receptors |
| 53 | Mm00515166_m1 | Il13ra2 | interleukin 15 | |
| 54 | Mm00434210_m1 | Il15 | interleukin 16 | |
| 55 | Mm00516039_m1 | Il16 | interleukin 17 receptor A | |
| 56 | Mm00515178_m1 | Il18r1 | interleukin 18 receptor accessory protein | |
| 57 | Mm00516053_m1 | Il18rap | interleukin 1 alpha | |
| 58 | Mm00663697_m1 | Il22ra1 | interleukin 23, alpha subunit p19 | |
| 59 | Mm01340213_m1 | Il27ra | interleukin 2 receptor, alpha chain | |
| 60 | Mm00434268_m1 | Il2rb | interleukin 2 receptor, gamma chain | |
| 61 | Mm01275139_m1 | Il4ra | interleukin 5 receptor, alpha | |
| 62 | Mm00434295_m1 | Il7r, Cd127 | interleukin 9 receptor | |
| 63 | Mm00434313_m1 | Il9r | interferon regulatory factor 1 | |
| 64 | Mm00499822_m1 | Il25 | interleukin 25 | |
| 65 | Mm00434305_m1 | Il9 | interleukin 9 | |
| 66 | Mm00499822_m1 | Il2ra, Cd25 | interleukin 2 receptor, alpha chain | |
| 67 | Mm00444241_m1 | Il22 | interleukin 22 | |
| 68 | Mm00516136_m1 | Ccl17 | chemokine (C-C motif) ligand 17 | Chemokines and chemokine receptors |
| 69 | Mm00839966_g1 | Ccl19 | chemokine (C-C motif) ligand 19 | |
| 70 | Mm00436439_m1 | Ccl22 | chemokine (C-C motif) ligand 22 | |
| 71 | Mm00438271_m1 | Ccr4 | chemokine (C-C motif) receptor 4 | |
| 72 | Mm00444662_m1 | Cxcl11 | chemokine (C-X-C motif) ligand 11 | |
| 73 | Mm01292123_m1 | Cxcr4 | chemokine (C-X-C motif) receptor 4 | |
| 75 | Mm00472858_m1 | Cxcr6 | Epstein-Barr virus induced gene 3 | |
| 76 | Mm00441263_m1 | Cxcl15 | chemokine (C-X-C motif) ligand 15 | |
| 77 | Mm00490880_m1 | Stat2 | signal transducer and activator of transcription 2 | Enzymes and adaptor proteins |
| 78 | Mm00600614_m1 | Jak1 | Janus kinase 1 | |
| 79 | Mm01208489_m1 | Jak2 | Janus kinase 2 | |
| 80 | Mm00477631_m1 | Bcl2 | B cell leukemia/lymphoma 2 | |

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|-----|---------------|----------------|--|---|
| 81 | Mm00432050_m1 | Bax | BCL2-associated X protein | |
| 82 | Mm00437783_m1 | Bcl2l1 | BCL2-like 1 | |
| 83 | Mm00438861_m1 | Fadd | Fas (TNF receptor superfamily member 6) | |
| 84 | Mm00442834_m1 | Gzmb | hepatitis A virus cellular receptor 2 | |
| 85 | Mm00436979_m1 | Tgm2 | transglutaminase 2, C polypeptide | |
| 86 | Mm00445109_m1 | Retnla, Fizz1 | resistin like alpha | |
| 87 | Mm00448427_m1 | Ptpn1, Ptp1b | protein tyrosine phosphatase, non-receptor type 1 | |
| 88 | Mm01278617_m1 | Mki67, Ki67 | antigen identified by monoclonal antibody Ki 67 | |
| 89 | Mm00661498_m1 | CD57, B3gat1 | beta-1,3-glucuronyltransferase 1 (glucuronosyltransferase P) | |
| 90 | Mm00451734_m1 | Pdcd1lg2 | programmed cell death 1 ligand 2 | Costimulatory and cell adhesion molecules |
| 91 | Mm00599683_m1 | Cd3e | CD3 antigen, epsilon polypeptide | |
| 92 | Mm01182108_m1 | Cd8a | CD8 antigen, alpha chain | |
| 93 | Mm00488332_m1 | Siglec1, Cd169 | sialic acid binding Ig-like lectin 1, sialoadhesin | |
| 94 | Mm00434455_m1 | Itgam | integrin alpha M | |
| 95 | Mm00483137_m1 | Cd28 | CD28 antigen | |
| 96 | Mm00801807_m1 | Itgal | integrin alpha M | |
| 97 | Mm00444461_m1 | Cd160 | CD160 antigen | |
| 98 | Mm01251919_m1 | Itgae, Cd103 | integrin alpha L | |
| 99 | Mm00442754_m1 | Cd4 | CD4 antigen(Cd4) | |
| 100 | Mm01149710_m1 | Ncam1, Cd56 | neural cell adhesion molecule 1 | |
| 101 | Mm00484683_m1 | Gata3 | glycogen synthase 1, muscle | Transcription factors |
| 102 | Mm00467257_m1 | Nfat5 | nuclear factor of activated T cells 5 | |
| 103 | Mm00468869_m1 | Hif1a | hexokinase 1 | |
| 104 | Mm00627599_m1 | Ucp2 | uncoupling protein 2 (mitochondrial, proton carrier) | Carrier proteins |
| 105 | Mm00437136_m1 | Tnfrsf18 | tumor necrosis factor receptor superfamily, member 18 | Cytokines and cytokine receptors |
| 106 | Mm00616981_m1 | Btla | B and T lymphocyte associated | |
| 107 | Mm00438864_m1 | Fasl | forkhead box P3 | |
| 108 | Mm01204974_m1 | Fas | Fas ligand (TNF superfamily, member 6) | |

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| 109 | Mm00442039_m1 | Tnfrsf4 | tumor necrosis factor receptor superfamily, member 4 | |
| 110 | Mm00440228_gH | Lta | lymphotoxin A | |
| 111 | Mm01342740_g1 | Socs1 | suppressor of cytokine signaling 1 | |
| 112 | Mm01249143_g1 | Socs3 | suppressor of cytokine signaling 3 | |

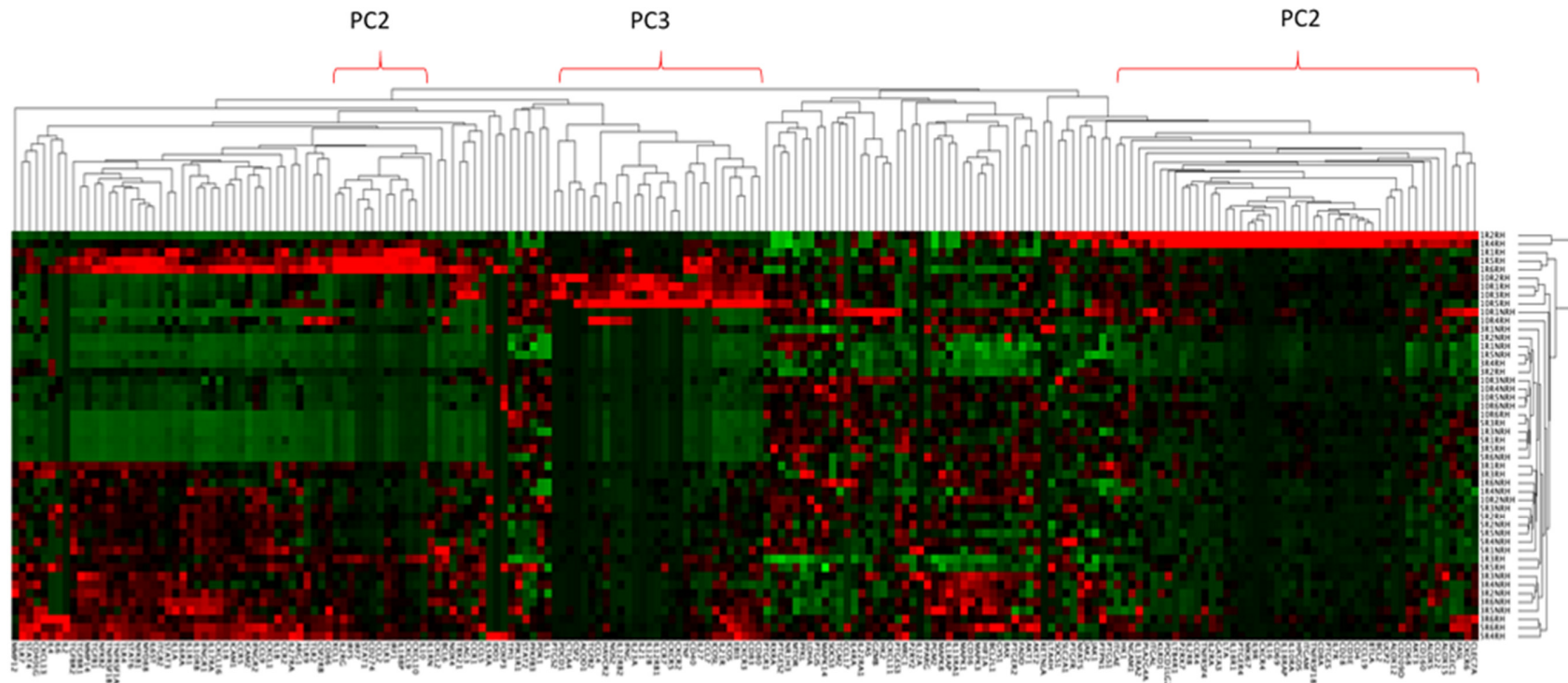


Figure S1. Unsupervised hierarchal clustering of gene expression data. qPCR was carried out on mice liver tissue infected and control with *L. infantum* at 1, 3, 5 and 10 dpi. Unsupervised hierarchal clustering of the complete NRQ data: samples vs genes, was applied and based on Euclidean distance and pairwise average-complete linkage. Genes downregulated during infection are shown in green and upregulated genes are in red.