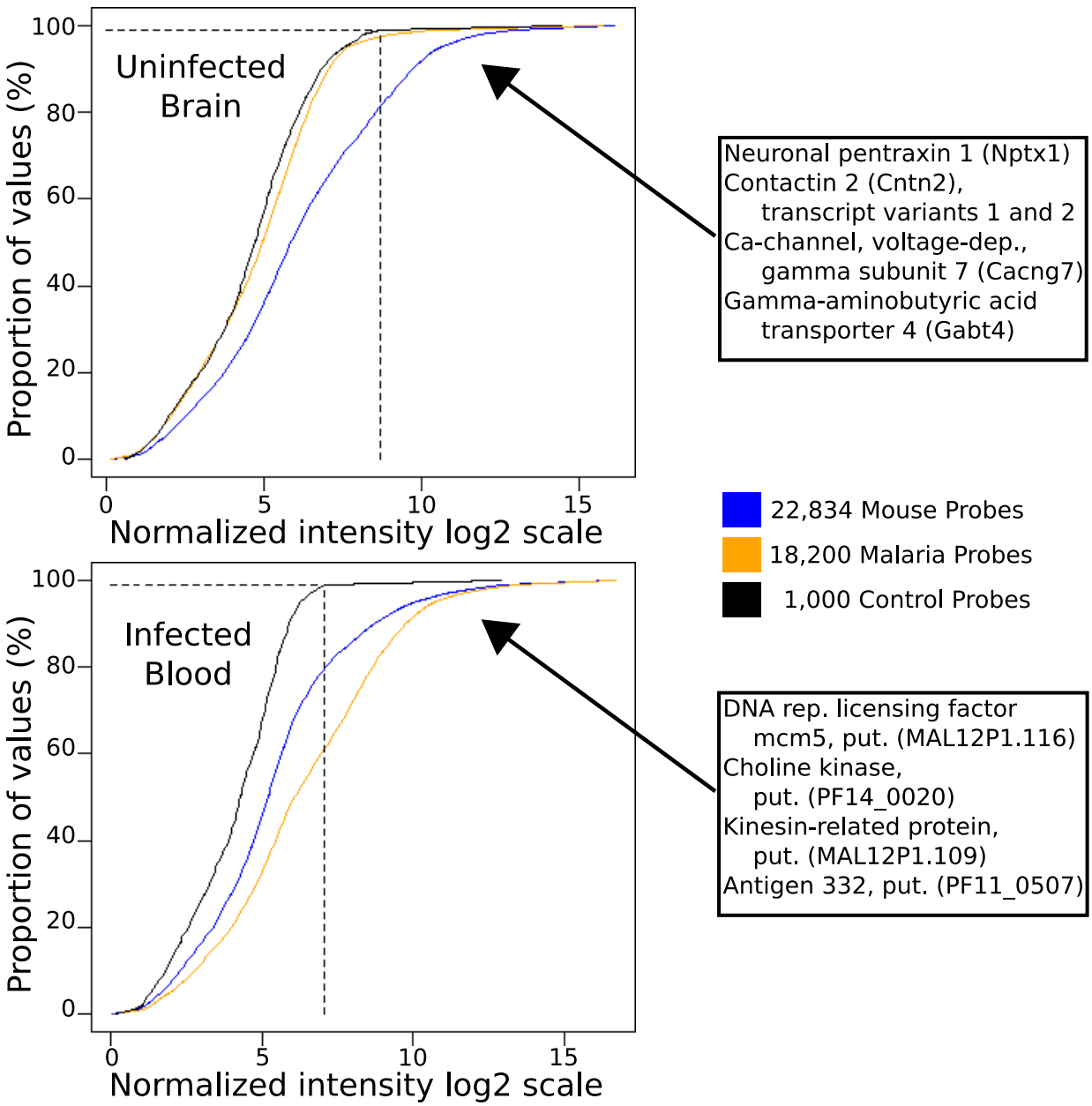

Uninfected
Brain
Proportion of values (%)
100
80
60
40
20
0
0
5
10
15
Normalized intensity log2 scale
Neuronal pentraxin 1 (Nptx1)
Contactin 2 (Cntn2),
transcript variants 1 and 2
Ca-channel, voltage-dep.,
gamma subunit 7 (Cacng7)
Gamma-aminobutyric acid
transporter 4 (Gabt4)
22,834 Mouse Probes
18,200 Malaria Probes
1,000 Control Probes
Infected
Blood
Proportion of values (%)
100
80
60
40
20
0
0
5
10
15
Normalized intensity log2 scale
DNA rep. licensing factor
mcm5, put. (MAL12P1.116)
Choline kinase,
put. (PF14_0020)
Kinesin-related protein,
put. (MAL12P1.109)
Antigen 332, put. (PF11_0507)

Figure 1:

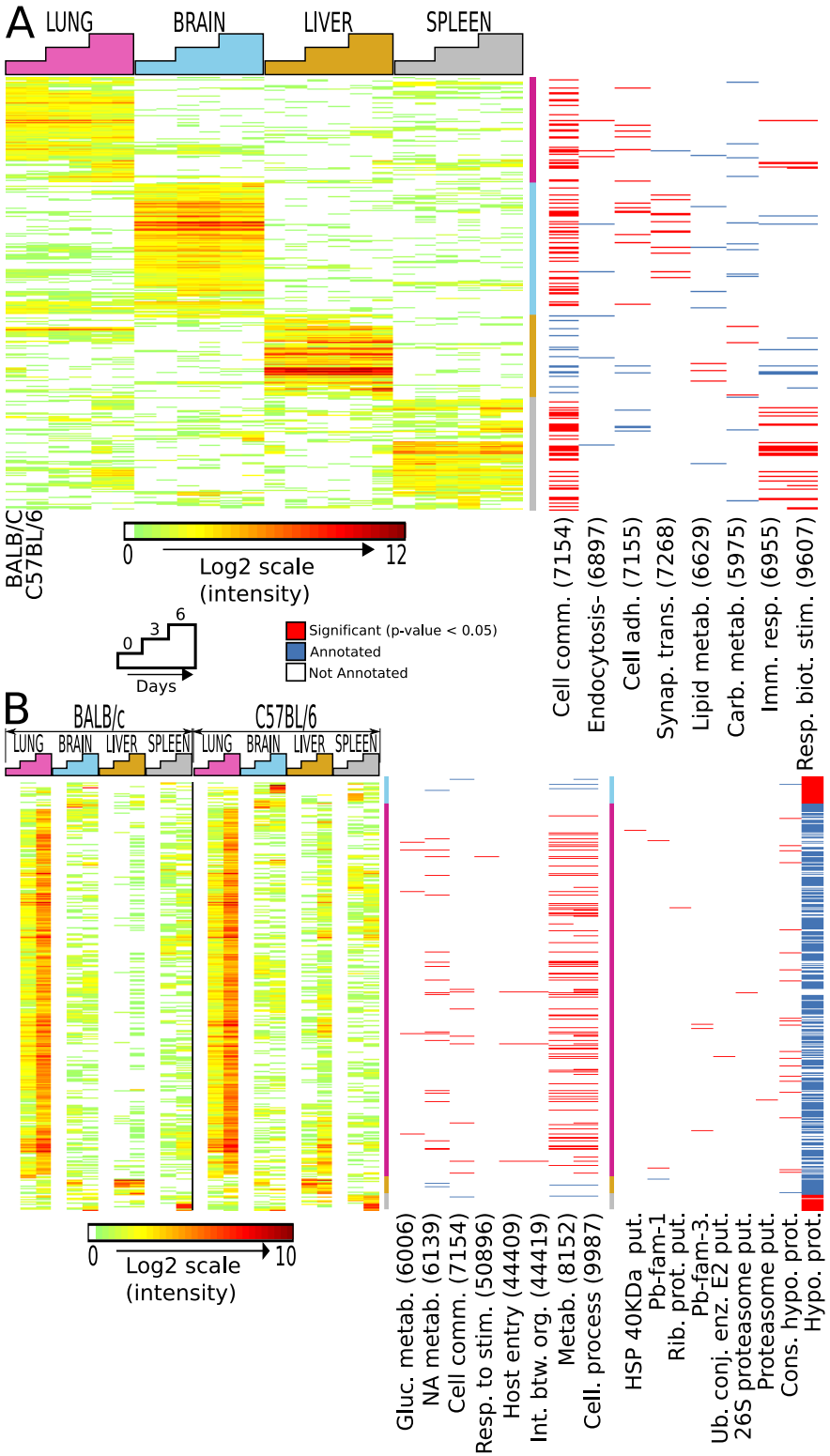

A
LUNG
BRAIN
LIVER
SPLEEN
BALB/C
C57BL/6
0
12
Log2 scale
(intensity)
6
3
0
Days
Significant (p-value < 0.05)
Annotated
Not Annotated
Cell comm. (7154)
Endocytosis- (6897)
Cell adh. (7155)
Synap. trans. (7268)
Lipid metab. (6629)
Carb. metab. (5975)
Imm. resp. (6955)
Resp. biot. stim. (9607)
B
BALB/c
C57BL/6
LUNG
BRAIN
LIVER
SPLEEN
0
10
Log2 scale
(intensity)
Gluc. metab. (6006)
NA metab. (6139)
Cell comm. (7154)
Resp. to stim. (50896)
Host entry (44409)
Int. btw. org. (44419)
Metab. (8152)
Cell. process (9987)
HSP 40KDa put.
Pb-fam-1
Rib. prot. put.
Pb-fam-3.
Ub. conj. enz. E2 put.
26S proteasome put.
Proteasome put.
Cons. hypo. prot.
Hypo. prot.

Figure 2:

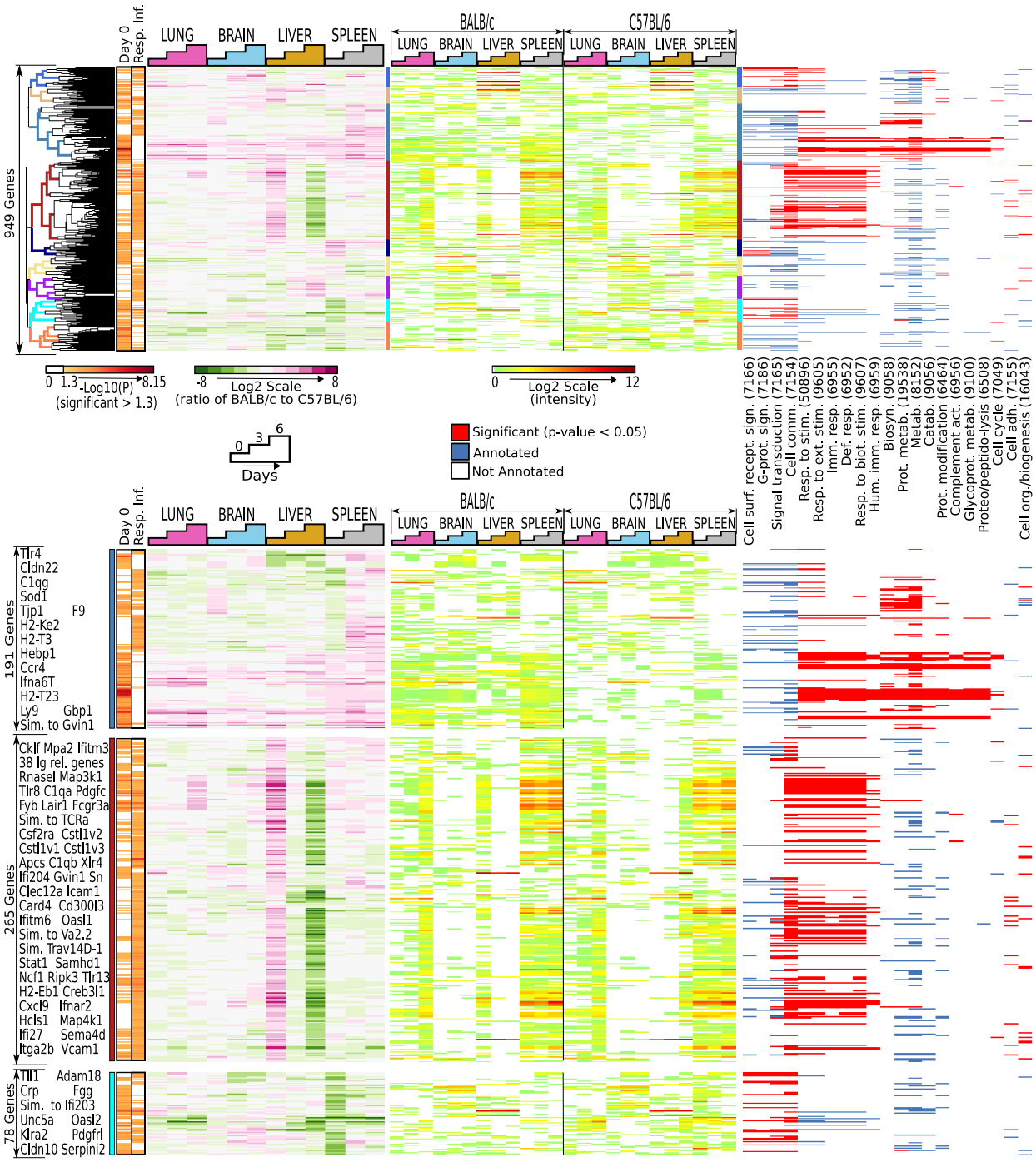

Day 0
Resp. Inf.
LUNG
BRAIN
LIVER
SPLEEN
BALB/c
C57BL/6
949 Genes
0 1.3 -Log10(P) 8.15
(significant > 1.3)
-8 Log2 Scale 8
(ratio of BALB/c to C57BL/6)
0 Log2 Scale 12
(intensity)
0 3 6
Days
Significant (p-value < 0.05)
Annotated
Not Annotated
Cell surf. recept. sign. (7166)
G-prot. sign. (7186)
Signal transduction (7165)
Cell comm. (7154)
Resp. to stim. (50896)
Resp. to ext. stim. (9605)
Imm. resp. (6955)
Def. resp. (6952)
Resp. to biot. stim. (9607)
Hum. imm. resp. (6959)
Biosyn. (9058)
Prot. metab. (19538)
Metab. (8152)
Catab. (9056)
Prot. modification (6464)
Complement act. (6956)
Glycoprot. metab. (9100)
Proteo/peptido-lysis (6508)
Cell cycle (7049)
Cell adh. (7155)
Cell org./biogenesis (16643)
191 Genes
Tlr4
Cldn22
C1qg
Sod1
Tjp1 F9
H2-Ke2
H2-T3
Hebp1
Ccr4
Ifna6T
H2-T23
Ly9 Gbp1
Sim. to Gvin1
265 Genes
Cklf Mpa2 Ifitm3
38 Ig rel. genes
Rnasel Map3k1
Tlr8 C1qa Pdgfc
Fyb Lair1 Fcgr3a
Sim. to TCRa
Csf2ra Cstl1v2
Cstl1v1 Cstl1v3
Apcs C1qb Xlr4
Ifi204 Gvin1 Sn
Clec12a Icam1
Card4 Cd300l3
Ifitm6 Oasl1
Sim. to Va2.2
Sim. Trav14D-1
Stat1 Samhd1
Ncf1 Ripk3 Tlr13
H2-Eb1 Creb3l1
Cxcl9 Ifnar2
Hcls1 Map4k1
Ifi27 Sema4d
Itga2b Vcam1
78 Genes
Tll1 Adam18
Crp Fgg
Sim. to Ifi203
Unc5a Oasl2
Klra2 Pdgfrl
Cldn10 Serpini2

Figure 3:

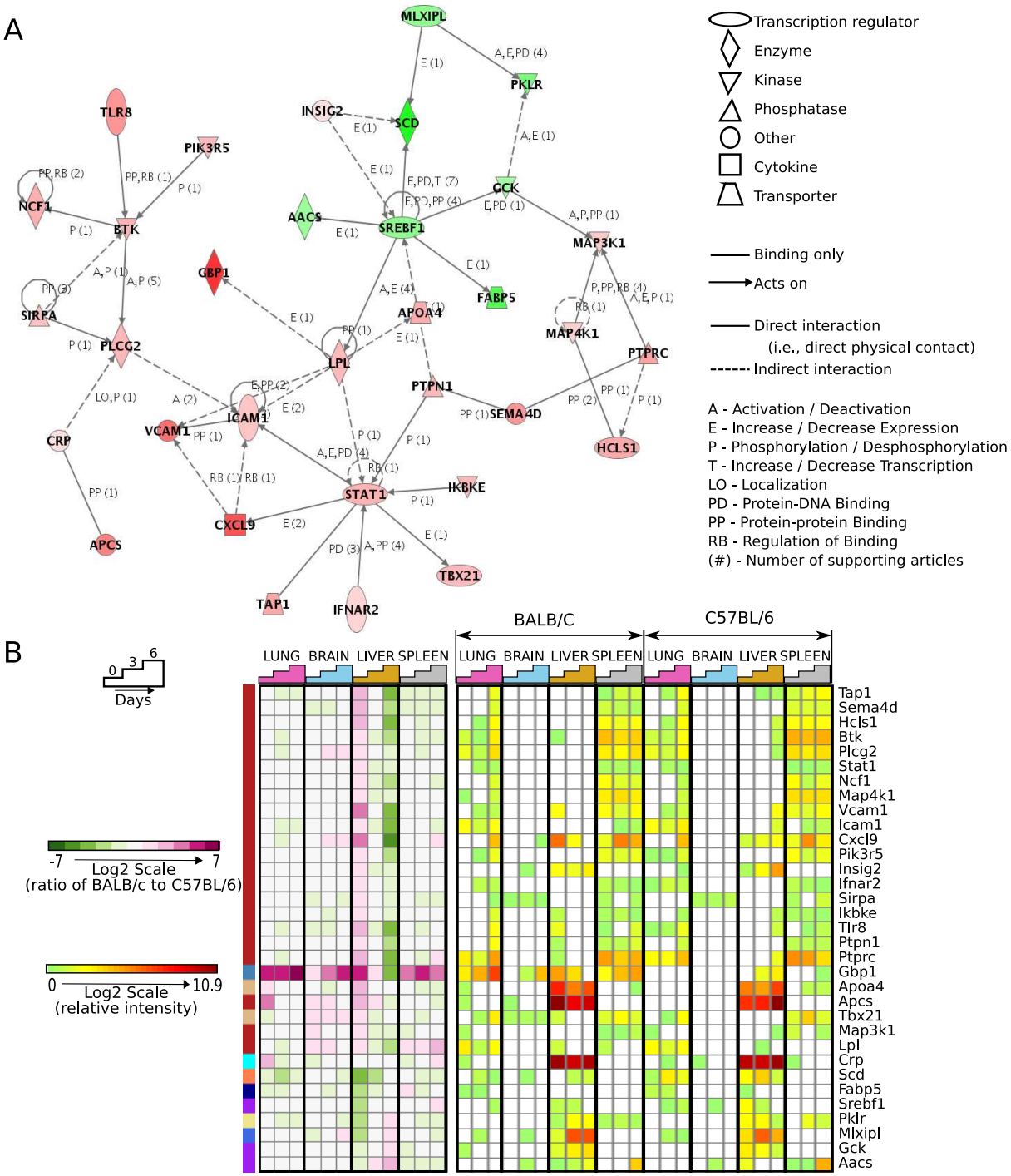

A
MLXIPL
PKLR
TLR8
INSIG2
SCD
PIK3R5
GCK
NCF1
AACS
SREBF1
BTK
MAP3K1
GBP1
FABP5
SIRPA
APOA4
MAP4K1
PLCG2
LPL
PTPRC
PTPN1
ICAM1
SEMA4D
VCAM1
HCLS1
CRP
STAT1
IKBKE
CXCL9
APCS
TBX21
TAP1
IFNAR2
Transcription regulator
Enzyme
Kinase
Phosphatase
Other
Cytokine
Transporter
Binding only
Acts on
Direct interaction
(i.e., direct physical contact)
Indirect interaction
A - Activation / Deactivation
E - Increase / Decrease Expression
P - Phosphorylation / Desphosphorylation
T - Increase / Decrease Transcription
LO - Localization
PD - Protein-DNA Binding
PP - Protein-protein Binding
RB - Regulation of Binding
(#) - Number of supporting articles
B
Days
BALB/C
C57BL/6
LUNG BRAIN LIVER SPLEEN
-7 Log2 Scale 7
(ratio of BALB/c to C57BL/6)
0 Log2 Scale 10.9
(relative intensity)
Tap1
Sema4d
Hcls1
Btk
Plcg2
Stat1
Ncf1
Map4k1
Vcam1
Icam1
Cxcl9
Pik3r5
Insig2
Ifnar2
Sirpa
Ikbke
Tlr8
Ptpn1
Ptprc
Gbp1
Apoa4
Apcs
Tbx21
Map3k1
Lpl
Crp
Scd
Fabp5
Srebf1
Pklr
Mlxipl
Gck
Aacs

Figure 4:

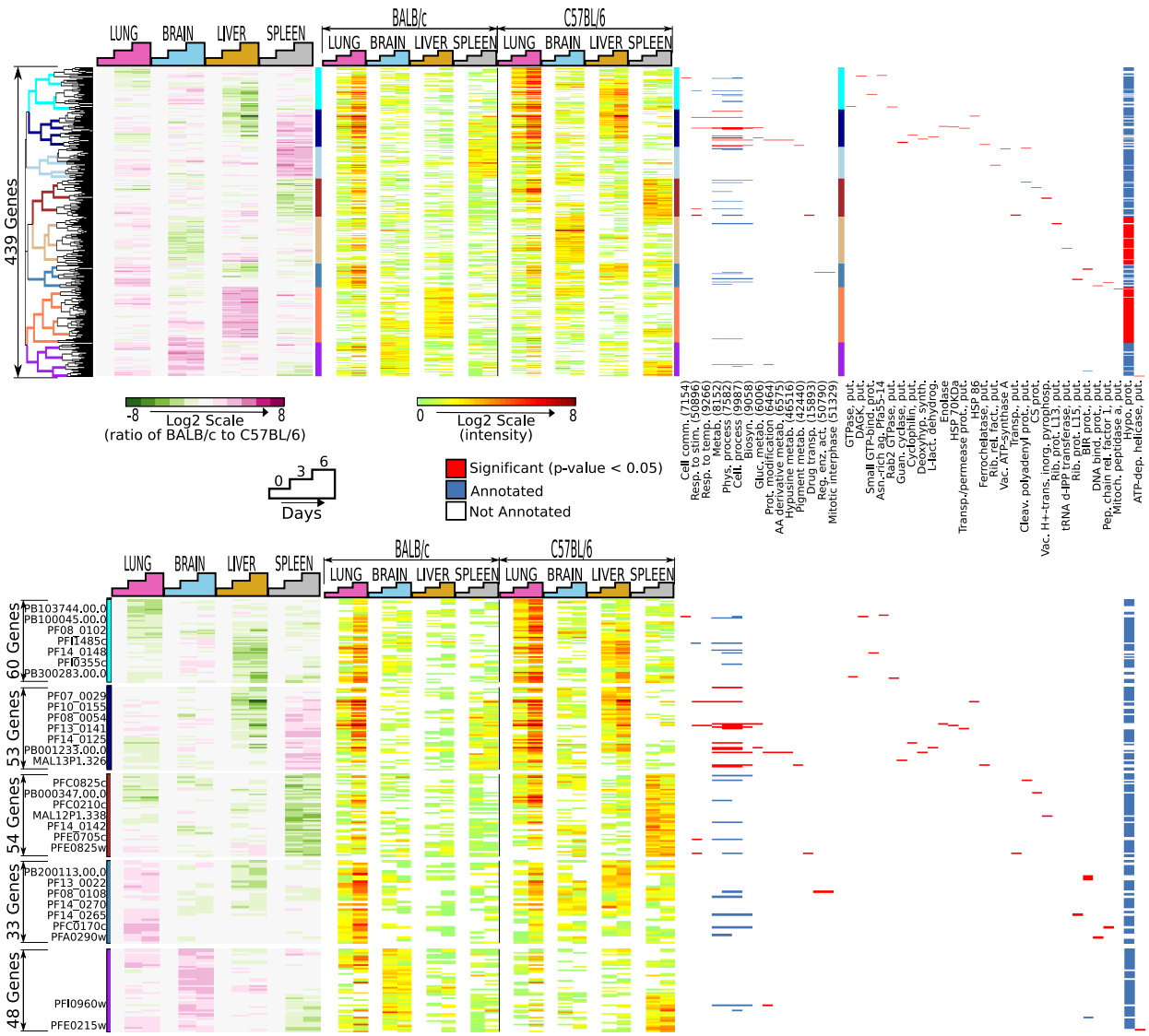

LUNG
BRAIN
LIVER
SPLEEN
BALB/c
C57BL/6
439 Genes
-8
Log2 Scale
(ratio of BALB/c to C57BL/6)
8
0
Log2 Scale
(intensity)
8
0
3
6
Days
Significant (p-value < 0.05)
Annotated
Not Annotated
60 Genes
53 Genes
54 Genes
33 Genes
48 Genes
PB103744.00.0
PB100045.00.0
PF08_0102
PFI1485c
PF14_0148
PFI0355c
PB300283.00.0
PF07_0029
PF10_0155
PF08_0054
PF13_0141
PF14_0125
PB001233.00.0
MAL13P1.326
PFC0825c
PB000347.00.0
PFC0210c
MAL12P1.338
PF14_0142
PFE0705c
PFE0825w
PB200113.00.0
PF13_0022
PF08_0108
PF14_0270
PF14_0265
PFC0170c
PFA0290w
PFI0960w
PFE0215w
Cell comm. (7154)
Resp. to stim. (6896)
Resp. to temp. (9266)
Metab. (8152)
Phys. process (7582)
Cell. process (9987)
Biosyn. (9058)
Gluc. metab. (6006)
Prot. modification (6464)
AA derivative metab. (6575)
Hypusine metab. (46516)
Pigment metab. (42449)
Drug transp. (47440)
Reg. enz. act. (50790)
Mitotic interphase (51329)
GTPase, put.
DAGK, put.
Small GTP-bind. prot.
Asn.-rich ag. Pfa55-14
Rab2 GTPase, put.
Guan. exchange, put.
Cyclophilin, put.
Deoxyhyp. synth.
L-lact. dehydrog.
Enolase
HSP 70/DnaJ
Transp./permease prot., put.
HSP 86
Ferrochelatase, put.
Rib. rel. fact., put.
Vac. ATP synthase A
Transp., put.
Cleav. polyadenyl prot., put.
CS prot.
Vac. H+-trans. inorg. pyrophosp.
Rib. prot. L13, put.
tRNA d-PP transferase, put.
Rib. prot. L15, put.
BIR prot., put.
DNA bind. prot., put.
Pep. chain rel. fac. prot., put.
Mitoch. peptidase a, put.
Hypo. prot.
ATP-dep. helicase, put.

Figure 5:

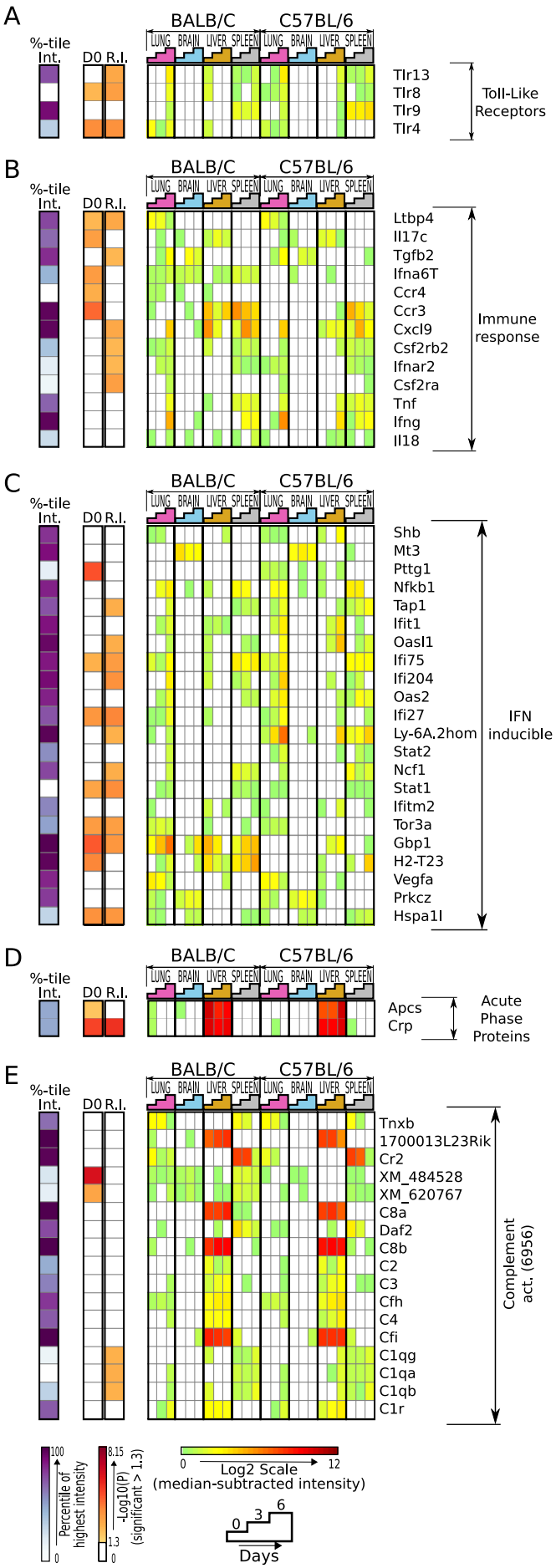
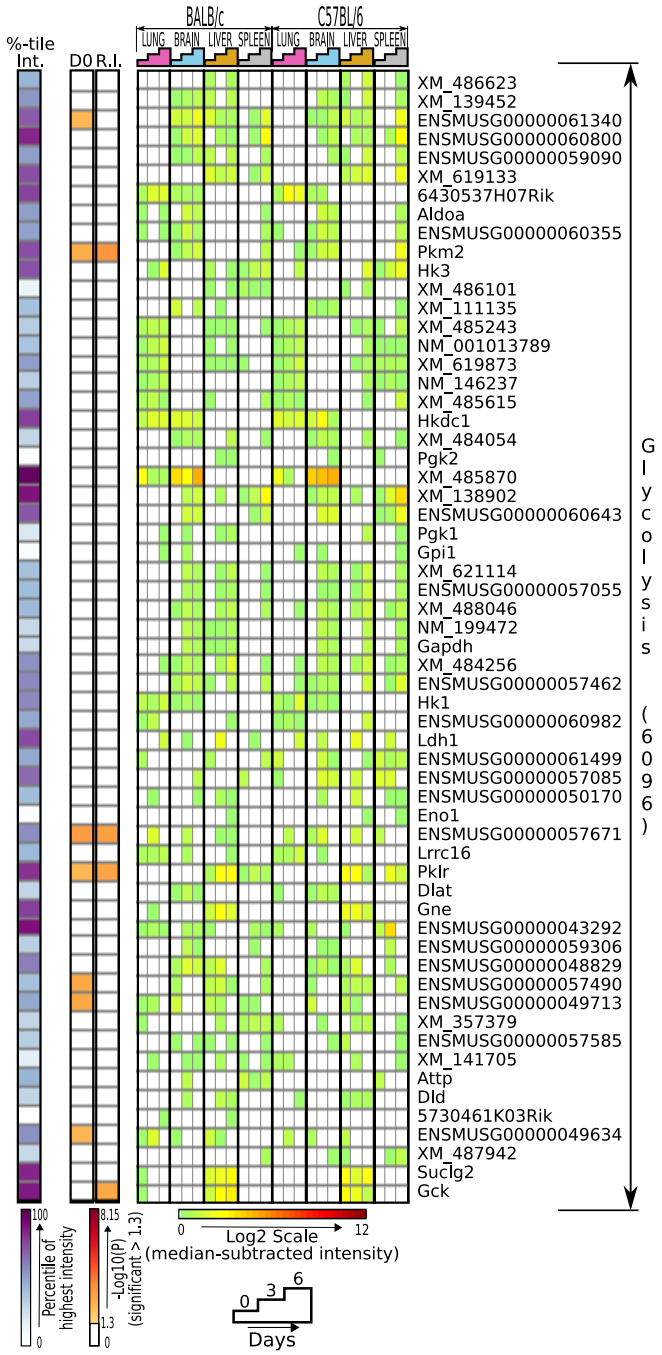

A
B
C
D
E
%-tile Int.
D0 R.I.
BALB/C
C57BL/6
LUNG
BRAIN
LIVER
SPLEEN
Tlr13
Tlr8
Tlr9
Tlr4
TolI-Like Receptors
Ltbp4
Il17c
Tgfb2
Ifna6T
Ccr4
Ccr3
Cxcl9
Csf2rb2
Ifnar2
Csf2ra
Tnf
Ifng
Il18
Immune response
Shb
Mt3
Pttg1
Nfkb1
Tap1
Ifit1
Oasl1
Ifi75
Ifi204
Oas2
Ifi27
Ly-6A.2hom
Stat2
Ncf1
Stat1
Ifitm2
Tor3a
Gbp1
H2-T23
Vegfa
Prkcz
Hspa1l
IFN inducible
Apcs
Crp
Acute Phase Proteins
Tnxb
1700013L23Rik
Cr2
XM_484528
XM_620767
C8a
Daf2
C8b
C2
C3
Cfh
C4
Cfi
C1qg
C1qa
C1qb
C1r
Complement act. (6956)
100
0
Percentile of highest intensity
8.15
1.3
0
-Log10(P) (significant > 1.3)
0
12
Log2 Scale
(median-subtracted intensity)
0
3
6
Days

Figure 6:


BALB/c
C57BL/6
LUNG
BRAIN
LIVER
SPLEEN
%-tile Int.
D0 R.I.
XM_486623
XM_139452
ENSMUSG00000061340
ENSMUSG00000060800
ENSMUSG00000059090
XM_619133
6430537H07Rik
Aldoa
ENSMUSG00000060355
Pkm2
Hk3
XM_486101
XM_111135
XM_485243
NM_001013789
XM_619873
NM_146237
XM_485615
Hkdc1
XM_484054
Pgk2
XM_485870
XM_138902
ENSMUSG00000060643
Pgk1
Gpi1
XM_621114
ENSMUSG00000057055
XM_488046
NM_199472
Gapdh
XM_484256
ENSMUSG00000057462
Hk1
ENSMUSG00000060982
Ldh1
ENSMUSG00000061499
ENSMUSG00000057085
ENSMUSG00000050170
Eno1
ENSMUSG00000057671
Lrrc16
Pklr
Dlat
Gne
ENSMUSG00000043292
ENSMUSG00000059306
ENSMUSG00000048829
ENSMUSG00000057490
ENSMUSG00000049713
XM_357379
ENSMUSG00000057585
XM_141705
Attp
Dld
5730461K03Rik
ENSMUSG00000049634
XM_487942
Suclg2
Gck
Glycolysis (6096)
100
0
Percentile of highest intensity
8.15
1.3
0
-Log10(P) (significant > 1.3)
0
12
Log2 Scale (median-subtracted intensity)
0
3
6
Days

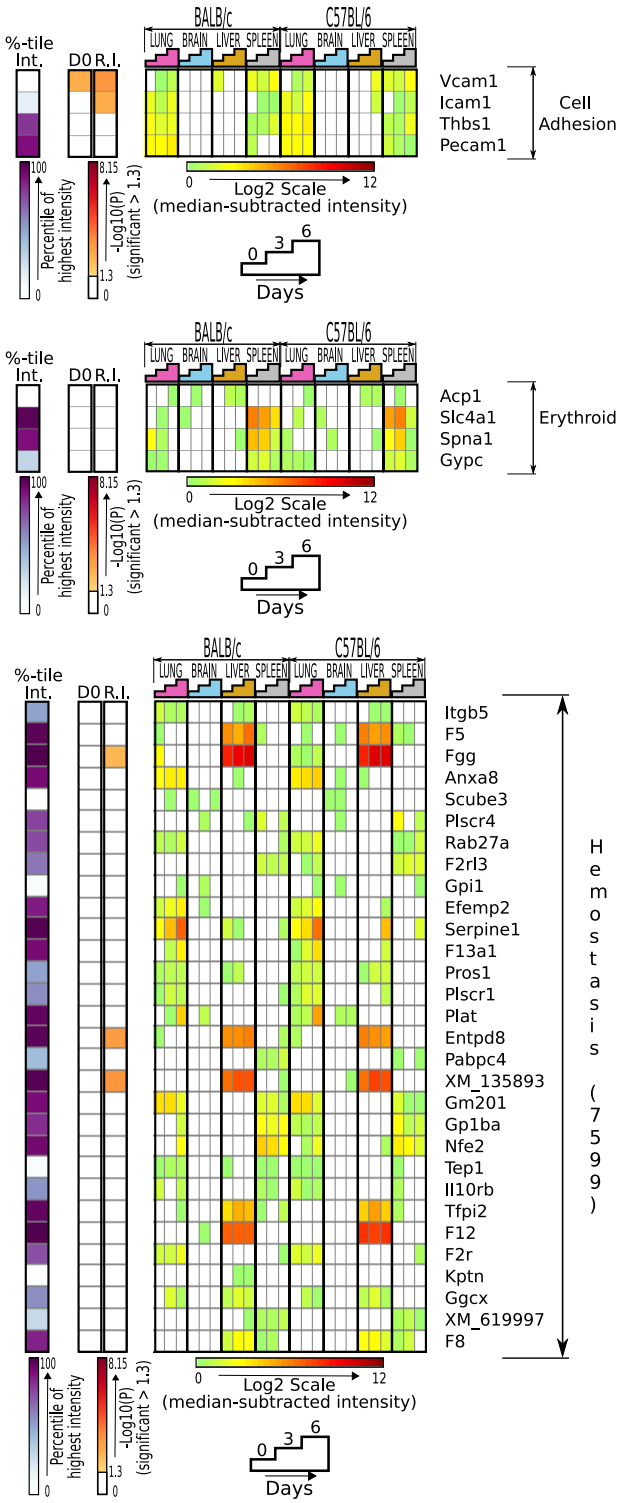

%-tile Int.
D0 R.I.
BALB/c
C57BL/6
LUNG BRAIN LIVER SPLEEN LUNG BRAIN LIVER SPLEEN
Vcam1
Icam1
Thbs1
Pecam1
Cell Adhesion
Log2 Scale (median-subtracted intensity)
Days
Acp1
Slc4a1
Spna1
Gypc
Erythroid
Itgb5
F5
Fgg
Anxa8
Scube3
Plscr4
Rab27a
F2rl3
Gpi1
Efemp2
Serpine1
F13a1
Pros1
Plscr1
Plat
Entpd8
Pabpc4
XM_135893
Gm201
Gp1ba
Nfe2
Tep1
Il10rb
Tfpi2
F12
F2r
Kptn
Ggcx
XM_619997
F8
Hemostasis (7599)
Percentile of highest intensity
-Log10(P) (significant > 1.3)

Figure S-1:

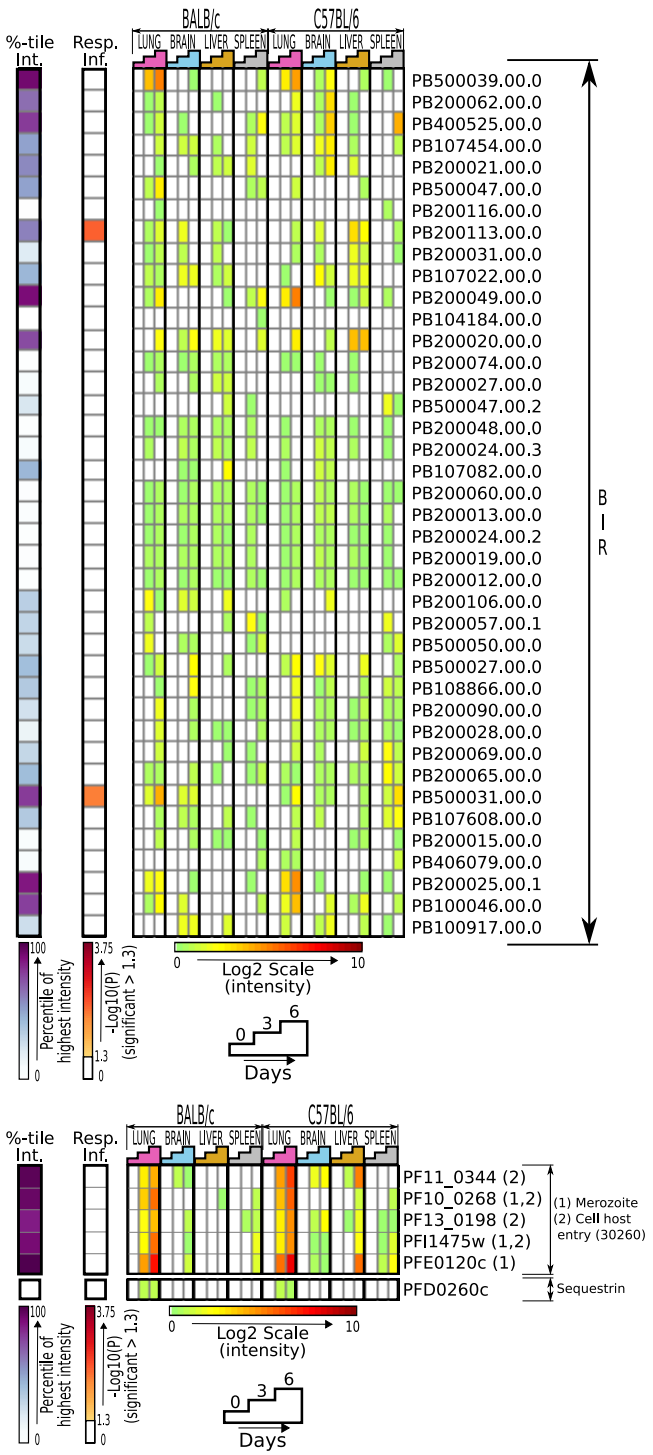

BALB/c
C57BL/6
LUNG
BRAIN
LIVER
SPLEEN
%-tile Int.
Resp. Inf.
PB500039.00.0
PB200062.00.0
PB400525.00.0
PB107454.00.0
PB200021.00.0
PB500047.00.0
PB200116.00.0
PB200113.00.0
PB200031.00.0
PB107022.00.0
PB200049.00.0
PB104184.00.0
PB200020.00.0
PB200074.00.0
PB200027.00.0
PB500047.00.2
PB200048.00.0
PB200024.00.3
PB107082.00.0
PB200060.00.0
PB200013.00.0
PB200024.00.2
PB200019.00.0
PB200012.00.0
PB200106.00.0
PB200057.00.1
PB500050.00.0
PB500027.00.0
PB108866.00.0
PB200090.00.0
PB200028.00.0
PB200069.00.0
PB200065.00.0
PB500031.00.0
PB107608.00.0
PB200015.00.0
PB406079.00.0
PB200025.00.1
PB100046.00.0
PB100917.00.0
B I R
100
Percentile of highest intensity
0
3.75
-Log10(P)
1.3
(significant > 1.3)
0
Log2 Scale (intensity)
0
10
6
3
0
Days
PF11_0344 (2)
PF10_0268 (1,2)
PF13_0198 (2)
PFI1475w (1,2)
PFE0120c (1)
PFD0260c
(1) Merozoite
(2) Cell host entry (30260)
Sequestrin

Figure S-2: