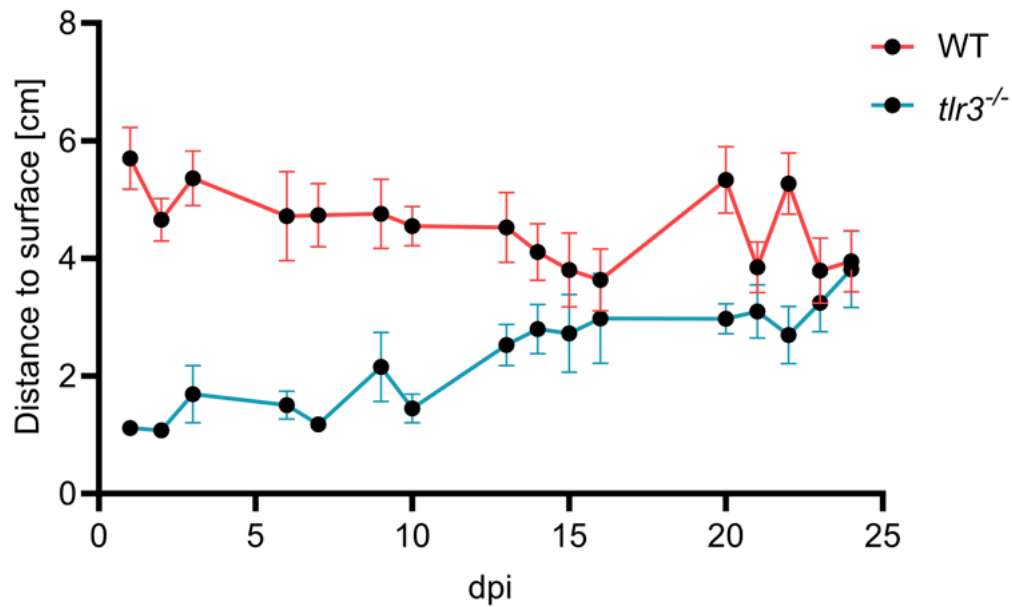
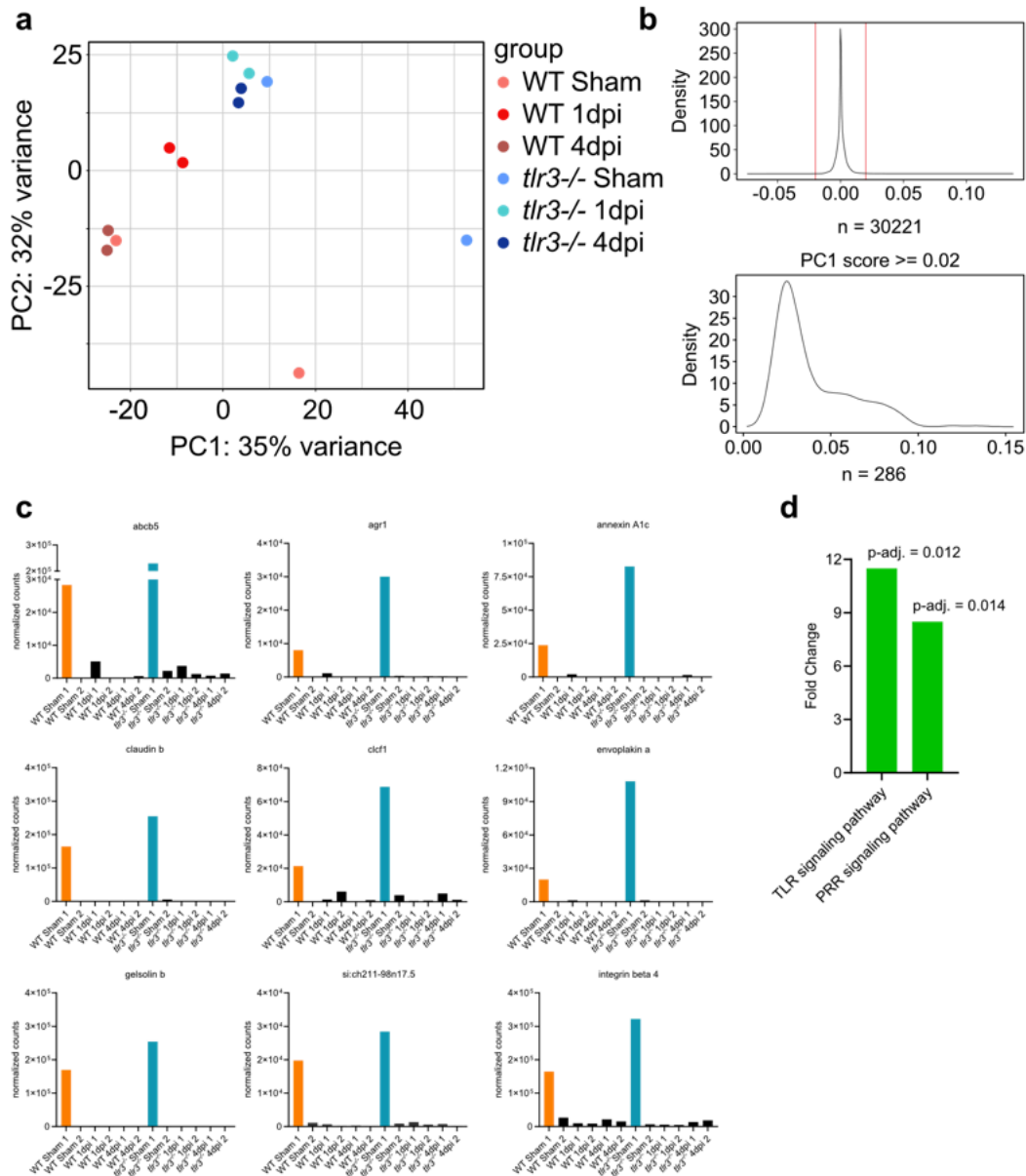


Supplemental Appendix



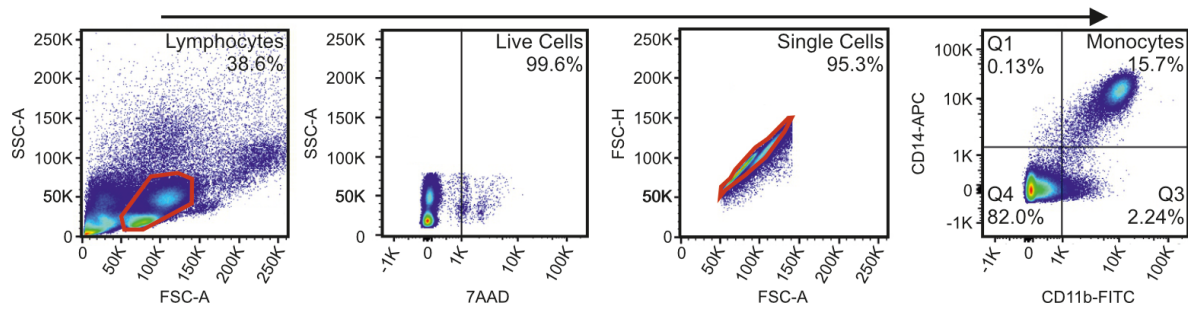
Supplemental Figure 1: Daily values of DTS evaluation of zebrafish subjected to cryoinjury.

Curves were generated calculating the mean DTS of all fish in the tank. $n = 8 - 11$ fish were kept in each tank and images were taken randomly during daytime $n = 3 - 5$ times per week. Data represents mean $\pm$ SEM.

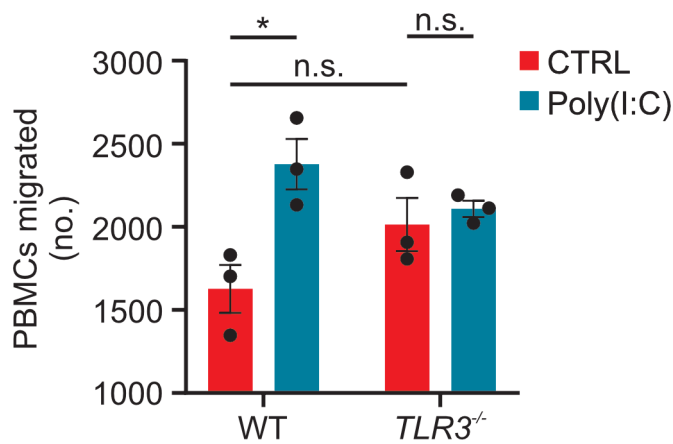


Supplemental Figure 2: RNAseq data filtering and validation of *tlr* signalling activation.

a PCA-plot generated by DESeq2 analysis without filtering. $n = 2$. **b** Top: Distribution of all genes found in our RNAseq data and their respective PC1 values. red lines indicate threshold of PC1 score = 0.02 used for data filtering. Bottom: Distribution of $n = 286$ genes with absolute PC1 scores ≥ 0.02 . x-axis displays PC1 score of genes; y-axis displays number of genes with certain PC1 values. **c** Expression patterns of representative genes with absolute PC1 scores ≥ 0.02 . Data represents gene counts normalized through DESeq2⁴³ analysis. **d** GO-terms enriched over a time axis of four days post myocardial infarction, assessed using our RNAseq data as inputs for short time-series expression miner (STEM)²⁶. p-adj. = adjusted p-value. GO-terms were deemed as significantly enriched at $p\text{-adj.} < 5 \times 10^{-2}$.



Supplemental Figure 3: Representative image of flow cytometry analysis of isolated human PBMCs. Live cells were assessed as 7-AAD negative. Mature Monocytes were viewed as double positive for CD14 and CD11b, after pre-gating for Lymphocytes.



Supplemental Figure 4: Difference of cells migrated between PBMCs incubated with media from Poly(I:C) treated and untreated WT and *TLR3* mutant hDFBs. Data represents means $\pm$ SEM. ns = not significant, * = adj. p-value $< 5 \times 10^{-2}$.

LLgeneSymbol	geneName
si:ch1073-15f12.3	si:ch1073-15f12.3
mslna	mesothelin a
vgl14l	vestigial like 4 like
cldnb	claudin b
wu:fk65c09	wu:fk65c09
cx44.2	connexin 44.2
epcam	epithelial cell adhesion molecule
fabp1b.2	fatty acid binding protein 1b, liver, tandem duplicate 2
cldna	claudin a
ednrbb	endothelin receptor type Bb
CABZ01083546.1	LAMININ BETA
evpla	envoplakin a
gpa33a	glycoprotein A33 (transmembrane), paralog a
cldne	claudin e
esrp1	epithelial splicing regulatory protein 1
col7a1	collagen, type VII, alpha 1
si:dkey-65b12.6	si:dkey-65b12.6
si:dkeyp-32g11.8	si:dkeyp-32g11.8
gpr31	G protein-coupled receptor 31
LOC108190590	cell wall protein DAN4-like
krt5	keratin 5
col17a1b	collagen, type XVII, alpha 1b
st14a	suppression of tumorigenicity 14a
zgc:111983	zgc:111983
si:dkey-247k7.2	si:dkey-247k7.2
cd44a	CD44 molecule (Indian blood group) a
pkp3a	plakophilin 3a
muc5.2	mucin 5.2
si:ch211-157c3.4	si:ch211-157c3.4
slpr5b	sphingosine-1-phosphate receptor 5b
XLOC_026881	
gsnb	gelsolin b
anxa1c	annexin A1c
LOC110438378	mucin-2-like
cldn7b	claudin 7b
CR792453.1	
tgm8	transglutaminase 8
krt97	keratin 97
itgb6	integrin, beta 6
myo1eb	myosin IEb
si:dkey-56e3.2	si:dkey-56e3.2
dok1a	docking protein 1a
nectin4a	nectin cell adhesion molecule 4a
abcb5	ATP-binding cassette, sub-family B (MDR/TAP), member 5
plekhg6	pleckstrin homology domain containing, family G (with RhoGef domain) member 6
oclna	occludin a

CR376766.3	
si:ch211-125o16.4	si:ch211-125o16.4
fat2	FAT atypical cadherin 2
spint1b	serine peptidase inhibitor, Kunitz type 1 b
mslnb	mesothelin b
tfap2c	transcription factor AP-2 gamma (activating enhancer binding protein 2 gamma)
gdpd3a	glycerophosphodiester phosphodiesterase domain containing 3a
si:dkeyp-86h10.3	si:dkeyp-86h10.3
krt17	keratin 17
jac4	jacalin 4
nos2a	nitric oxide synthase 2a, inducible
plek2	pleckstrin 2
evplb	envoplakin b
sh3d19	SH3 domain containing 19
zgc:173915	zgc:173915
zgc:163079	zgc:163079
scel	sciellin
irg1l	immunoresponsive gene 1, like
si:dkey-151j17.4	si:dkey-151j17.4
trpm4b.2	transient receptor potential cation channel, subfamily M, member 4b, transient receptor potential cation channel, subfamily M, member 4b, tandem duplicate 2
krt93	keratin 93
lsr	lipolysis stimulated lipoprotein receptor
tgm1	transglutaminase 1, K polypeptide
si:dkey-239b22.1	si:dkey-239b22.1
atp1a1a.3	ATPase Na ⁺ /K ⁺ transporting subunit alpha 1a, tandem duplicate 3
st14b	suppression of tumorigenicity 14b
si:dkey-193p11.2	si:dkey-193p11.2
dkk1a	dickkopf WNT signaling pathway inhibitor 1a
agr2	anterior gradient 2
pkp1b	plakophilin 1b
capn9	calpain 9
zgc:174917	zgc:174917
coro2a	coronin, actin binding protein, 2A
LOC108191643	LIM domain and actin-binding protein 1-like
esrp2	epithelial splicing regulatory protein 2
cldni	claudin i
sox9b	SRY-box transcription factor 9b
tjp3	tight junction protein 3
rhcg1l	Rh family, C glycoprotein, like 1
spint1a	serine peptidase inhibitor, Kunitz type 1 a
XLOC_039063	
zgc:101810	zgc:101810
wu:fb18f06	wu:fb18f06
krt1-19d	keratin, type 1, gene 19d
cdh26.2	cadherin 26, tandem duplicate 2
LOC565594	uncharacterized threonine-rich GPI-anchored glycoprotein PJ4664.02

si:ch211-241e1.3	si:ch211-241e1.3
vwa2	von Willebrand factor A domain containing 2
itga3a	integrin, alpha 3a
tmem176l.3b	transmembrane protein 176l.3b
LOC100535170	uncharacterized LOC100535170,non-coding
aqp4	aquaporin 4
si:dkey-38n4.2	si:dkey-38n4.2
cdh1	cadherin 1, type 1, E-cadherin (epithelial)
si:ch211-261n11.7	si:ch211-261n11.7
LOC101882375	uncharacterized LOC101882375
si:dkey-7c18.24	si:dkey-7c18.24
si:ch211-153b23.3	si:ch211-153b23.3
ms4a17a.5	membrane-spanning 4-domains, subfamily A, member 17A.5
erbb3a	erb-b2 receptor tyrosine kinase 3a
trim16	tripartite motif containing 16
clcf1	cardiotrophin-like cytokine factor 1
wu:fc34e06	wu:fc34e06
LOC799227	proteinase-activated receptor 1-like
anxa3a	annexin A3a
muc5.1	mucin 5.1, oligomeric mucus/gel-forming
cldn1	claudin 1
dsg2.1	desmoglein 2, tandem duplicate 1
tmem30b	transmembrane protein 30B
aqp3a	aquaporin 3a
inhbaa	inhibin subunit beta Aa
zgc:110333	zgc:110333
cfl1l	cofilin 1 (non-muscle), like
s100v1	S100 calcium binding protein V1
alox5b.2	arachidonate 5-lipoxygenase b, tandem duplicate 2
grhl2a	grainyhead-like transcription factor 2a
si:ch211-39f2.3	si:ch211-39f2.3
zgc:91849	zgc:91849
si:dkey-248g15.3	si:dkey-248g15.3
tceb2	
itga6b	integrin, alpha 6b
LOC568392	cadherin-1-like
rab11al	RAB11a, member RAS oncogene family, like
vcana	versican a
si:ch211-217k17.9	si:ch211-217k17.9
atp8b1	ATPase phospholipid transporting 8B1
zgc:153665	zgc:153665
zgc:112242	
gdpd2	glycerophosphodiester phosphodiesterase domain containing 2
LOC562648	poly [ADP-ribose] polymerase 14
znf750	zinc finger protein 750

flnbl	filamin B, like
si:ch211-202f5.3	si:ch211-202f5.3
cers3b	ceramide synthase 3b
ripk4	receptor-interacting serine-threonine kinase 4
BX537263.3	UNCHARACTERIZED
lamc2	laminin, gamma 2
zmp:0000000846	zmp:0000000846
myo5b	myosin VB
ms4a17a.2	membrane-spanning 4-domains, subfamily A, member 17a.2
BX004785.3	
six2a	SIX homeobox 2a
ms4a17a.3	membrane-spanning 4-domains, subfamily A, member 17A.3
cfap70	cilia and flagella associated protein 70
BX322555.3	
apoeb	apolipoprotein Eb
slc25a4	solute carrier family 25 member 4
oclnb	occludin b
crabp2a	cellular retinoic acid binding protein 2, a
dlx3b	distal-less homeobox 3b
sb:cb1058	sb:cb1058
si:ch211-167j9.4	si:ch211-167j9.4
cldnh	claudin h
nmnat2	nicotinamide nucleotide adenylyltransferase 2
sox11a	SRY-box transcription factor 11a
LOC101886371	
tgm5l	transglutaminase 5, like
apnl	actinoporin-like protein
pcdh7a	protocadherin 7a
grhl3	grainyhead-like transcription factor 3
si:ch211-157j23.3	si:ch211-157j23.3
FO681323.1	
cldnf	claudin f
si:dkey-156n14.5	si:dkey-156n14.5
vmola	vitelline membrane outer layer 1 homolog a
tmem79b	transmembrane protein 79b
agr1	anterior gradient 1
LOC100002266	NACHT
il13ra2	interleukin 13 receptor, alpha 2
adh8a	alcohol dehydrogenase 8a
XLOC_020301	
cyp26a1	cytochrome P450, family 26, subfamily A, polypeptide 1
ms4a17a.1	membrane-spanning 4-domains, subfamily A, member 17A.1
si:ch211-196h16.5	si:ch211-196h16.5
irf6	interferon regulatory factor 6
zgc:92313	zgc:92313
spint2	serine peptidase inhibitor, Kunitz type, 2

si:ch73-27e22.8	si:ch73-27e22.8
si:dkey-262k9.2	si:dkey-262k9.2
BX640512.2	
col5a3b	collagen, type V, alpha 3b
si:ch211-103n10.5	si:ch211-103n10.5
CABZ01052573.1	MESOTHELIN PRECURSOR PRE PRO MEGAKARYOCYTE POTENTIATING FACTOR
cart3	cocaine- and amphetamine-regulated transcript 3
pax6b	paired box 6b
itgb4	integrin, beta 4
ms4a17a.4	membrane-spanning 4-domains, subfamily A, member 17A.4
si:ch211-108d22.2	si:ch211-108d22.2
si:ch211-147g22.4	si:ch211-147g22.4
dbnla	drebrin-like a
XLOC_024493	
si:ch211-207n23.2	si:ch211-207n23.2
XLOC_019059	
LOC103909118	prostaglandin D2 receptor 2-like
zgc:136963	zgc:136963
igf2a	insulin-like growth factor 2a
LOC100331080	CUB and zona pellucida-like domain-containing protein 1
mhc1zka	major histocompatibility complex class I ZKA
ca2	carbonic anhydrase II
si:dkey-3k20.1	si:dkey-3k20.1
myrfl	myelin regulatory factor like
ela2l	elastase 2 like
si:dkey-222n6.2	si:dkey-222n6.2
ppl	periplakin
tp73	tumor protein p73
si:ch211-98n17.5	si:ch211-98n17.5
fzd10	frizzled class receptor 10
soul2	heme-binding protein soul2
hbba2	hemoglobin, beta adult 2
cul9	cullin 9
hbaa2	hemoglobin, alpha adult 2
zgc:172106	zgc:172106
si:ch211-59h6.1	si:ch211-59h6.1
si:ch211-106h4.12	si:ch211-106h4.12
cyp26c1	cytochrome P450, family 26, subfamily C, polypeptide 1
BX323861.3	INTERFERON INDUCED VERY LARGE GTPASE 1
si:dkey-23c22.7	si:dkey-23c22.7
adgrf6	adhesion G protein-coupled receptor F6
ptprfb	protein tyrosine phosphatase receptor type Fb
LOC108179634	uncharacterized LOC108179634,non-coding

tjp2a	tight junction protein 2a (zona occludens 2)
LOC110439515	uncharacterized LOC110439515,non-coding
dhrs13a.2	dehydrogenase/reductase (SDR family) member 13a, tandem duplicate 2
met	MET proto-oncogene, receptor tyrosine kinase
scpp8	secretory calcium-binding phosphoprotein 8
ano9b	anoctamin 9b
zgc:172120	zgc:172120
si:ch211-129c21.1	si:ch211-129c21.1
tmem154	transmembrane protein 154
tmprss13b	transmembrane serine protease 13b
LOC100536946	uncharacterized LOC100536946,non-coding
nuggc.3	nuclear GTPase, germinal center associated, tandem duplicate 3
si:ch211-227m13.1	si:ch211-227m13.1
si:ch73-289h5.4	si:ch73-289h5.4
tmem176l.4	transmembrane protein 176l.4
osbpl7	oxysterol binding protein-like 7
zgc:174680	zgc:174680
btg2	B-cell translocation gene 2
si:dkey-167k11.5	si:dkey-167k11.5
LOC108191643	
col27a1a	collagen, type XXVII, alpha 1a
rab25a	RAB25, member RAS oncogene family a
tmem37	transmembrane protein 37
elf3	E74-like factor 3 (ets domain transcription factor, epithelial-specific)
znf185	zinc finger protein 185 with LIM domain
CU179758.1	
si:ch211-190k17.19	si:ch211-190k17.19
XLOC_039647	
tp63	tumor protein p63
arrdc1a	arrestin domain containing 1a
lipcb	lipase, hepatic b
LOC103910198	uncharacterized LOC103910198,non-coding
si:ch211-5k11.8	si:ch211-5k11.8
cldn23a	claudin 23a
LOC101886271	uncharacterized LOC101886271,non-coding
ildrla	immunoglobulin-like domain containing receptor 1a
abca12	ATP-binding cassette, sub-family A (ABC1), member 12
erbb3b	erb-b2 receptor tyrosine kinase 3b
fam160a1a	family with sequence similarity 160 member A1a
LOC100007813	uncharacterized LOC100007813
ltb4r2a	leukotriene B4 receptor 2a
ankrd9	ankyrin repeat domain 9
zgc:73226	zgc:73226
LOC559196	NACHT
ASS1	argininosuccinate synthase 1 [Source:HGNC Symbol
BX005417.1	uncharacterized LOC108183423 [Source:NCBI gene

CABZ01029938.1	NACHT, LRR and PYD domains-containing protein 12 [Source:NCBI gene]
CABZ01035279.1	PEST proteolytic signal-containing nuclear protein-like [Source:NCBI gene]
CABZ01044154.1	uncharacterized LOC101883546 [Source:NCBI gene]
CABZ01092746.1	uncharacterized LOC100535731 [Source:NCBI gene]
CCDC134	si:dkey-167k11.5 [Source:ZFIN]
CR318588.3	uncharacterized LOC101884954 [Source:NCBI gene]
CR339041.1	major histocompatibility complex class I-related gene protein-like [Source:NCBI gene]
CU571315.3	serine protease 27-like [Source:NCBI gene]
CU914622.2	si:ch73-329n5.6 [Source:NCBI gene]
FQ378016.1	high affinity cGMP-specific 3',5'-cyclic phosphodiesterase 9A-like [Source:NCBI gene]
LO017965.1	DELTA-actitoxin-Aeq1c-like [Source:NCBI gene]
lsp1	lymphocyte specific protein 1 [Source:ZFIN]
STX3	zgc:165520 [Source:ZFIN]
TSTA3 (1 of many)	zgc:100864 [Source:ZFIN]

Supplemental Table 1: List of genes with absolute PC1 scores ≥ 0.02 , which were excluded from RNA-seq analysis.