

## Supplementary materials

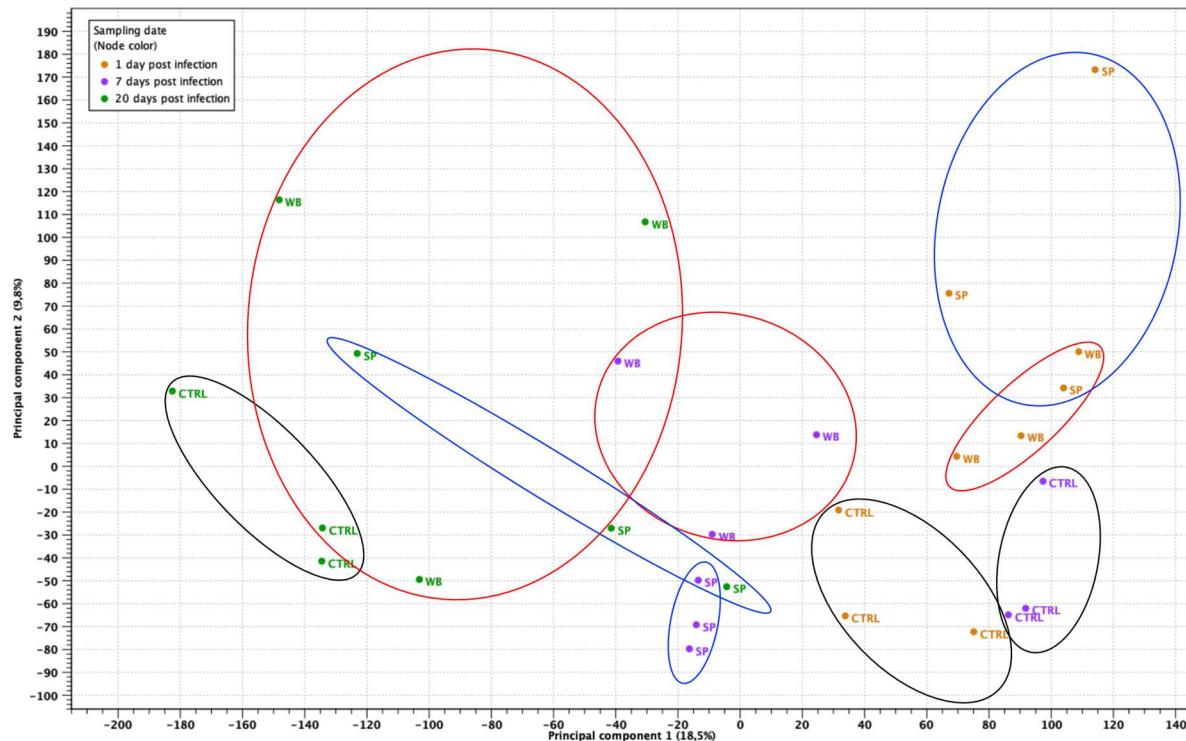


Figure S1. Principal component analysis of RNA-seq samples

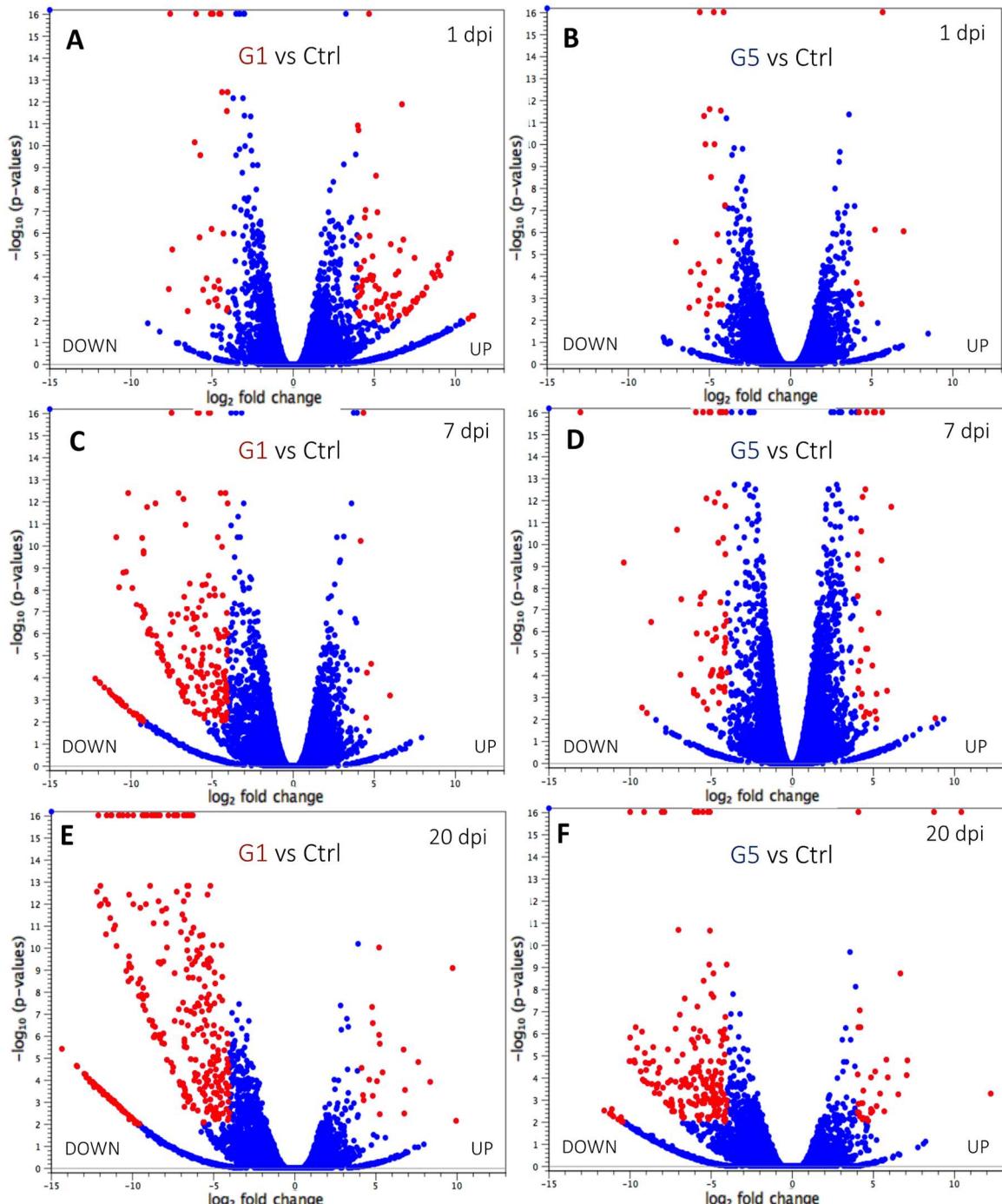


Figure S2. Volcano plots of genes differentially expressed in trout challenged with the IPNV isolates RTTX (A, C and E) and ALKA (B, D and F) compared to uninfected controls at days 1, 7 and 20 post-challenge. The red dots represent genes with significant differential expression ( $\text{FDR} \leq 0.01$ ) and a large change in absolute expression when compared to the control ( $\text{LogFC} \geq |4|$ ), while the blue dots indicate those genes that do not comply with such criteria.

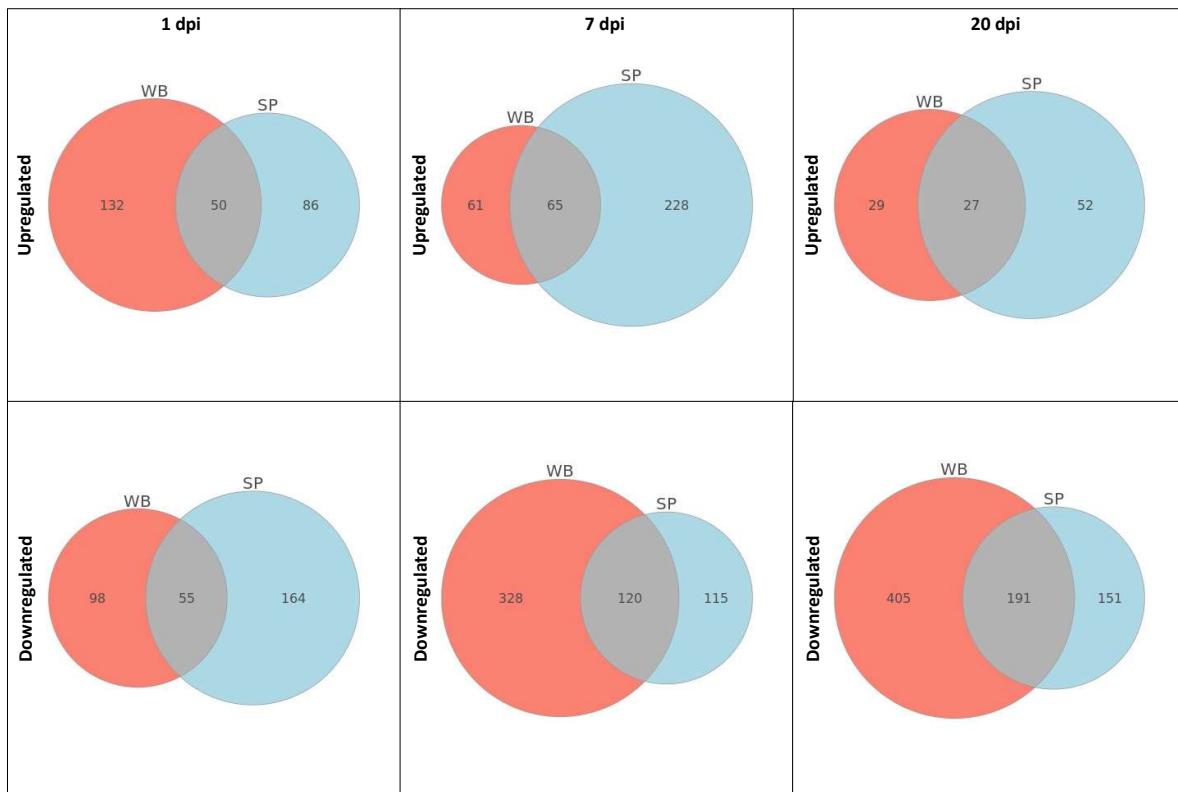


Figure S3. Venn diagrams of differentially expressed genes with respect to the control in fish challenged with RTTX (WB) and ALKA (SP) at days 1, 7 and 20 post-challenge.

Table S1. Immune response related genes differentially expressed (up and down regulated) in fish challenged with IPNV isolates RTTX and ALKA. The human homologues for each group are shown, as well as those that were common between both groups (BOTH)

Group	Regulation	1 dpc	7 dpc		20 dpc			
ALKA		<i>CD79B</i>	<i>TRIM39</i>	<i>TRIM21</i>	<i>CRP</i>	<i>TRIM39</i>	<i>GBP4</i>	<i>IGLL5</i>
		<i>C4B_2</i>	<i>IGLL5</i>	<i>ZC3H12A</i>	<i>SLC26A6</i>	<i>MAP3K14</i>	<i>ST3GAL1</i>	<i>PTGDS</i>
		<i>PLA2G3</i>	<i>AHR</i>	<i>EDN1</i>	<i>ARG2</i>	<i>CD209</i>	<i>CLEC4M</i>	<i>NPPA</i>
		<i>APOA4</i>	<i>MR1</i>	<i>CD200</i>	<i>AXL</i>	<i>UMOD</i>	<i>MX2</i>	<i>MRC1</i>
							<i>PGC</i>	
Up		<i>PTGDS</i>	<i>CFP</i>	<i>TLR5</i>	<i>RGCC</i>	<i>NFKBID</i>	<i>FTH1</i>	<i>GP2</i>
		<i>MPO</i>	<i>CST3</i>	<i>ITGB7</i>	<i>CRISP3</i>	<i>HEBP2</i>	<i>COL17A1</i>	
		<i>AHSG</i>		<i>S100A11</i>	<i>FOLR3</i>	<i>MUC5B</i>	<i>TNFAIP6</i>	
		<i>LEAP2</i>	<i>PROS1</i>		<i>AMPD3</i>	<i>TCN1</i>	<i>EEF2</i>	<i>GAA</i>
						<i>PSAP</i>	<i>MUC5AC</i>	
Down		<i>CRP</i>	<i>ZP3</i>	<i>ST3GAL1</i>	<i>TRIM35</i>	<i>IGLL1</i>	<i>TRIM39</i>	<i>MEFV</i>
		<i>ARG2</i>	<i>USP14</i>	<i>FGL2</i>	<i>TRIM27</i>	<i>APOL1</i>	<i>APOA4</i>	<i>FRK</i>
		<i>PI4K2A</i>	<i>HEBP2</i>	<i>CUL1</i>	<i>CYP27B1</i>	<i>TRIM25</i>	<i>HLA-E</i>	<i>RSAD2</i>
		<i>PSMD11</i>	<i>SNAP25</i>	<i>CD200</i>	<i>PTGDS</i>	<i>HERC5</i>	<i>HLA-</i>	<i>IFI44L</i>
							<i>CCL19</i>	<i>IFITM3</i>
		<i>AMPD3</i>	<i>TSHB</i>	<i>CRH</i>	<i>DQB1</i>	<i>GCG</i>	<i>ADGRE5</i>	<i>ZC3H12A</i>
		<i>S100B</i>		<i>GYG1</i>				<i>IFIT1</i>
		<i>PSMD12</i>	<i>MBP</i>					<i>B2M</i>
Both		<i>HHLA2</i>	<i>TKFC</i>	<i>MX1</i>	<i>TRIM35</i>	<i>HSP90AA1</i>	<i>TRIM25</i>	<i>HSP90AA1</i>
Up		<i>NLRC3</i>		<i>HEL111</i>	<i>SPHK2</i>	<i>PCK1</i>	<i>PNP</i>	<i>FGA</i>
				<i>CST3</i>				<i>HEL</i>
		<i>MUC3A</i>						<i>-72p</i>
Down		<i>HSP90AA1</i>	<i>ARG2</i>	<i>STAT1</i>	<i>HEL-S-62p</i>	<i>RSAD2</i>	<i>BTN1A1</i>	<i>HEL-S-62p</i>
		<i>CD209</i>		<i>CLEC4M</i>	<i>IFI44L</i>	<i>MFAP4</i>	<i>PLA2G3</i>	<i>TRIM21</i>
		<i>PCK1</i>	<i>MRC1</i>	<i>HEL-S-</i>	<i>APOA4</i>	<i>USP18</i>	<i>CLEC4M</i>	<i>CEACAM1</i>
		<i>72p</i>	<i>AMPD3</i>	<i>PSMD13</i>	<i>HERC5</i>	<i>IFIT5</i>	<i>MX1</i>	<i>ZP4</i>
								<i>ZC3H12A</i>
								<i>ZP3</i>
								<i>CD209</i>
RTTX		<i>CTSV</i>	<i>ZP4</i>	<i>TRIM25</i>	<i>REG1B</i>	<i>LGALS3</i>	<i>VCP</i>	<i>APAO4</i>
			<i>ZP3</i>		<i>LGALS3</i>	<i>HK1</i>		<i>PRF1</i>
Up		<i>UMOD</i>		<i>NPPA</i>				<i>GP2</i>
		<i>AKAP1</i>	<i>GP2</i>	<i>TIMP2</i>				<i>COL17A1</i>
		<i>EEF1A1</i>	<i>PSAP</i>					<i>NCAM1</i>

	<i>HEL-S-62p</i>	<i>IFITM3</i>	<i>MEFV</i>	<i>TRIM35</i>	<i>CCL20</i>	<i>HEL-S-</i>	<i>RIPK2</i>	<i>CD274</i>	<i>CTSL</i>
	<i>MFAP4</i>	<i>CEACAM1</i>	<i>62p</i>	<i>CTSV</i>	<i>IFI44L</i>	<i>MFAP4</i>	<i>CTSV</i>	<i>MFAP4</i>	<i>TRIM39</i>
	<i>ACOD1</i>	<i>CYP27B1</i>	<i>CXCL11</i>	<i>CCL19</i>	<i>TRIM39</i>	<i>AHR</i>	<i>ZP4</i>	<i>ZP3</i>	<i>CST7</i>
	<i>NOS2</i>	<i>ARG2</i>	<i>C7</i>	<i>ACOD1</i>	<i>ZP4</i>	<i>TRIM25</i>	<i>ZP3</i>	<i>CD209</i>	<i>CLEC10A</i>
									<i>GSN</i>
	<i>CLEC4E</i>								<i>CLEC10A</i>
									<i>CLDN1</i>
									<i>HPRT1</i>
									<i>UMOD</i>
									<i>TLR5</i>
	<i>TLR5</i>	<i>GP2</i>	<i>PIK3CG</i>	<i>UMOD</i>	<i>IFI27</i>	<i>BMP6</i>	<i>ALDH3B1</i>	<i>MAP3K5</i>	<i>AKAP1</i>
									<i>LRP1</i>
	<i>HEL-S-72p</i>		<i>ADM2</i>	<i>HEL57</i>	<i>TIMP2</i>	<i>PS1TP5BP1</i>	<i>NLRC3</i>	<i>FTH1</i>	<i>DLL1</i>
<b>Down</b>	<i>GPR84</i>	<i>LRG1</i>	<i>SOCS3</i>	<i>MMP9</i>	<i>CAND1</i>	<i>GPR45</i>	<i>ALDH3B1</i>		<i>HEL57</i>
				<i>EEF1A1</i>	<i>HP</i>			<i>TIMP2</i>	<i>PS1TP5BP1</i>
								<i>LYZ</i>	<i>RAPGEF4</i>
								<i>SYNGR1</i>	<i>MMP9</i>
									<i>GLA</i>
								<i>NPDC1</i>	<i>PADI2</i>
									<i>CTSD</i>
								<i>XAF1</i>	<i>GYG1</i>
									<i>APEH</i>
								<i>TSHR</i>	<i>PSMC3</i>
									<i>ADGRG3</i>

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