Additional File 4: Table S2. Real time *q*PCR analysis of genes selected for confirmation of microarray data. Candidate transcripts expression in HK (A) and liver (B) RNA isolated from rainbow trout fed a control diet (CTRL) or a diet enriched with 4 mg Se Kg^{-1} (Sel-Plex), and injected with either PBS or poly(I:C). The expression of gene transcripts was quantified by *q*PCR and normalized against the geometric mean of three housekeeping genes (*ef-1α*, *drpII*, *hprt*) from the same samples, and then used for statistical analysis. The transcript expression is reported as a fold change, calculated as the average expression level of stimulated samples divided by that of the controls. The results represent the mean ± SEM from five pools of HK or liver RNA extracted from 3 individuals from 3 different tanks. The letters above the columns indicate values that are statistically significant vs the controls (p<0.05) in the group injected with poly(I:C), with different letters indicating significant differences between the two diet regimes. Asterisks indicate values that are statistically significant vs the control (*p*<0.05) in the group fed 4 mg Se Kg^{-1} and injected with PBS. The primers used are listed in Table 2.

A

	IFNγ2 Microarray (CUST_201_PI429021944)	IFNγ2 *q*PCR	MX2 Microarray (TC 149586)	MX2 *q*PCR	SOCS3 Microarray (IM M 590)	SOCS3 *q*PCR	CATH1 Microarray (IM M 568)	CATH1 *q*PCR	TrxR3b Microarray (CUST_56_PI429042546)	TrxR3b *q*PCR	SelPa Microarray (CUST_38_PI429042546)	SelPa *q*PCR
Sel-Plex/Poly(I:C)	19.2	31.2±4.7[a]	28.6	42.4±12.8[a]	14.8	18.0±4.9	13.2	22.8±4.9	2.6	2.3±0.2[a]	-2.5	-2.5±0.01[a]
CTRL/Poly(I:C)	5.9	12±2.2[b]	25.5	35.2±3.0[a]	11.7	32.6±6.8	7.6	11.9±4.9[a]	2.2	3.3±0.1[a]	-2.1	-2.1±0.01[a]
Sel-Plex/PBS	-1.2	-1.4±0.1	-1.0	0.7±0.1	1.5	1.4±0.3	-1.7	-1.2±0.1	1.1	1.23±0.1	1.0	1.2±0.1

B

	IFN1α Microarray (TC 138564)	IFN1α *q*PCR	VIG-1 Microarray (TC 136044)	VIG-1 *q*PCR	SAA Microarray (TC 171675)	SAA *q*PCR	HAMP Microarray (CUST_193_PI429021944)	HAMP *q*PCR	IGFBP-1b Microarray (CUST_2_PI429021970)	IGFBP-1b *q*PCR	SelPb Microarray (CUST_39_PI429042546)	SelPb *q*PCR
Sel-Plex/Poly(I:C)	2.6	3.0±0.3[a]	31.7	84.3±6.1[a]	82.1	178.9±44.7[a]	13.8	8.8±1.0[a]	-9.1	-33.3±0.01[a]	-2.0	-2.9±0.03[a]
CTRL/Poly(I:C)	2.3	2.6±0.1[a]	33.5	83.4±4.5[a]	37.6	109.6±33.5[a]	7.0	33.2±7.1[b]	-9.4	-25±0.01[a]	-2.1	-2.2±0.06[a]
Sel-Plex/PBS	1.1	1.1±0.1	1.3	1.4±0.4	-1.7	-1.92±0.1	2.0	3.3±1.3	1.6	-2.1±0.3*	1.1	1.2±0.1