Table S4: Canonical pathways annotated by IPA and changed in 6dpf CONVD compared to GF zebrafish larvae

Canonical Pathway	-log(p-value)	Molecules[a]
Acute Phase Response Signaling	1.84E01	SERPINA1, C9, SAA1, AGT, CRP, MAP3K5, C4B, CEBPB, RBP2, SOCS1, CFB, PLG, NFKBIA, FGB, SOCS3, FGG, MAPK14, C3, ITIH4, FGA, HPX, TF
Complement System	7.56E00	C7, C9, C4B, C6, CFH, C3, CFB
Coagulation System	5.9E00	SERPINA1, PLG, FGB, FGG, F5, FGA
Glioma Invasiveness Signaling	3.79E00	PLG, RHOG, RHOU, MMP9, TIMP2
Methane Metabolism	3.36E00	MPO, PRDX1, ACADM
Fatty Acid Elongation in Mitochondria	3.27E00	HADH, HADHA, HADHB
Neuroprotective Role of THOP1 in Alzheimer's Disease	3.25E00	PLG, AGT, PRKACB, MMP9
Production of Nitric Oxide and Reactive Oxygen Species in Macrophages	3.19E00	NFKBIA, RHOG, RHOU, MAP3K5, MAPK14, MPO, PPP1R3C
Lysine Degradation	3.12E00	ASTL, BBOX1, MMP9, HADH, MMP13, HADHA, HADHB
Role of Macrophages, Fibroblasts and Endothelial Cells in Rheumatoid Arthritis	2.98E00	TGFB1, NFKBIA, SOCS3, MAPK14, TRY6, MMP13, CEBPB, CEBPD, SOCS1, CFB
PPARα/RXRα Activation	2.98E00	TGFB1, NFKBIA, MAPK14, ABCA1, GPD1, PRKACB, LPL
Stilbene, Coumarine and Lignin Biosynthesis	2.82E00	MPO, CYP24A1, PRDX1
Fatty Acid Metabolism	2.8E00	CPT1B, CYP1A1, HADH, HADHA, HADHB, ACADM
Phototransduction Pathway	2.78E00	GNGT2, OPN1LW, RHO, PRKACB
p38 MAPK Signaling	2.62E00	TGFB1, MAP3K5, MAPK14, TIFA, MKNK2
Atherosclerosis Signaling	2.58E00	TGFB1, MMP9, MMP13, LPL, TPSAB1
Germ Cell-Sertoli Cell Junction Signaling	2.51E00	TGFB1, RHOG, RHOU, MAP3K5, MAPK14, TUBA1A
Type I Diabetes Mellitus Signaling	2.49E00	NFKBIA, SOCS3, MAP3K5, MAPK14, SOCS1
Propanoate Metabolism	2.43E00	HADHA, ACSS1, HADHB, ACADM
LXR/RXR Activation	2.36E00	ABCA1, MMP9, HADH, LPL
Valine, Leucine and Isoleucine Degradation	2.36E00	HADH, HADHA, HADHB, ACADM
Type II Diabetes Mellitus Signaling	2.34E00	NFKBIA, SOCS3, MAP3K5, CEBPB, SOCS1
IL-17 Signaling	2.3E00	PTGS2, CRP, MAPK14, CEBPB
IL-8 Signaling	2.28E00	HBEGF, PTGS2, RHOG, RHOU, MPO, MMP9
Synthesis and Degradation of Ketone Bodies	2.25E00	HADHA, HADHB
Colorectal Cancer Metastasis Signaling	2.17E00	TGFB1, PTGS2, RHOG, RHOU, PRKACB, MMP9, MMP13
Hepatic Fibrosis / Hepatic Stellate Cell Activation	2.11E00	TGFB1, AGT, MMP9, MMP13, TIMP2
Leukocyte Extravasation Signaling	2.05E00	MAPK14, CLDN4, MMP9, MMP13, TIMP2, CLDN9
IL-6 Signaling	2.01E00	NFKBIA, MAPK14, CEBPB, SOCS1
Inositol Metabolism	2.01E00	COX6B1, ETFDH, ERO1L, DECR1
Glucocorticoid Receptor Signaling	1.97E00	TGFB1, NFKBIA, AGT, FGG, MAPK14, PRKACB, CEBPB
LPS/IL-1 Mediated Inhibition of RXR Function	1.95E00	CPT1B, FABP6, SULT2B1, ABCA1, FABP1, FABP2
β-alanine Metabolism	1.85E00	HADHA, HADHB, ACADM
Tryptophan Metabolism	1.84E00	CYP1A1, PTGS2, HADH, HADHA, HADHB
HIF1α Signaling	1.78E00	EGLN3, MAPK14, MMP9, MMP13
Pancreatic Adenocarcinoma Signaling	1.76E00	TGFB1, HBEGF, PTGS2, MMP9
Maturity Onset Diabetes of Young (MODY) Signaling	1.73E00	FABP1, FABP2
Cardiac Hypertrophy Signaling	1.71E00	TGFB1, RHOG, RHOU, MAP3K5, MAPK14, PRKACB
IL-10 Signaling	1.7E00	NFKBIA, SOCS3, MAPK14
RAR Activation	1.67E00	TGFB1, MAP3K5, MAPK14, PRKACB, RBP2
Butanoate Metabolism	1.67E00	HADH, HADHA, HADHB
IL-12 Signaling and Production in Macrophages	1.66E00	TGFB1, MST1, MAPK14, CEBPB
Growth Hormone Signaling	1.65E00	IGF2, SOCS3, SOCS1
NRF2-mediated Oxidative Stress Response	1.61E00	TXN, JUNB, MAP3K5, MAPK14, PRDX1
IL-22 Signaling	1.56E00	SOCS3, MAPK14
Prolactin Signaling	1.56E00	SOCS3, CEBPB, SOCS1
ILK Signaling	1.55E00	PTGS2, RHOG, RHOU, KRT18, MMP9
LPS-stimulated MAPK Signaling	1.54E00	NFKBIA, MAP3K5, MAPK14
4-1BB Signaling in T Lymphocytes	1.5E00	NFKBIA, MAP3K5
Dopamine Receptor Signaling	1.47E00	PRKACB, QDPR, PPP1R3C
Mitochondrial Dysfunction	1.44E00	CPT1B, COX6B1, COX4I1, NDUFA4
Hepatic Cholestasis	1.43E00	FABP6, NFKBIA, GCG, PRKACB
VDR/RXR Activation	1.42E00	IGFBP1, CEBPB, CYP24A1

Molecular Mechanisms of Cancer	1.38E00	TGFB1, NFKBIA, RHOG, RHOU, MAP3K5, MAPK14, PRKACB
Pyruvate Metabolism	1.38E00	HADHA, ACSS1, HADHB
Phenylalanine Metabolism	1.33E00	MPO, PRDX1
MIF Regulation of Innate Immunity	1.31E00	NFKBIA, PTGS2
April Mediated Signaling	1.31E00	NFKBIA, MAPK14
Role of Osteoblasts, Osteoclasts and Chondrocytes in Rheumatoid Arthritis	1.3E00	TGFB1, NFKBIA, MAP3K5, MAPK14, MMP13
Bladder Cancer Signaling	1.29E00	THBS1, MMP9, MMP13
RANK Signaling in Osteoclasts	1.28E00	NFKBIA, MAP3K5, MAPK14
B Cell Activating Factor Signaling	1.27E00	NFKBIA, MAPK14
Role of PKR in Interferon Induction and Antiviral Response	1.25E00	NFKBIA, MAPK14
IL-1 Signaling	1.24E00	NFKBIA, MAPK14, PRKACB
Oxidative Phosphorylation	1.24E00	COX6B1, COX4I1, ATP6V0A2, NDUFA4
HMGB1 Signaling	1.23E00	RHOG, RHOU, MAPK14
Tight Junction Signaling	1.18E00	TGFB1, CLDN4, PRKACB, CLDN9
Cholecystokinin/Gastrin-mediated Signaling	1.16E00	RHOG, RHOU, MAPK14
Airway Pathology in Chronic Obstructive Pulmonary Disease	1.13E00	MMP9
Bile Acid Biosynthesis	1.13E00	HADHA, HADHB
Renin-Angiotensin Signaling	1.12E00	AGT, MAPK14, PRKACB
Toll-like Receptor Signaling	1.11E00	NFKBIA, MAPK14
CD27 Signaling in Lymphocytes	1.07E00	NFKBIA, MAP3K5
Semaphorin Signaling in Neurons	1.05E00	RHOG, RHOU
Corticotropin Releasing Hormone Signaling	1.04E00	PTGS2, MAPK14, PRKACB
Amyloid Processing	1.02E00	MAPK14, PRKACB

[a] Human transcripts that are homologous to zebrafish transcripts that are differentially expressed in 6dpf CONVD compared to GF zebrafish larvae.