

**Supplementary Table 1. Functional annotation analysis based on GO terms in zebrafish embryos 0.5 hpi**

GO Term	Name	Genes	<i>p</i> value
<b>Biological process</b>			
GO:0008610	lipid biosynthetic process	7	<0.01
GO:0048511	rhythmic process	5	<0.01
GO:0006813	potassium ion transport	5	0.01
GO:0015672	monovalent inorganic cation transport	6	<0.05
GO:0010033	response to organic substance	34	<0.001
GO:0009725	response to hormone	19	<0.001
GO:0031667	response to nutrient levels	12	<0.001
GO:0050801	ion homeostasis	15	<0.001
GO:0006094	gluconeogenesis	4	<0.001
GO:0006006	glucose metabolic process	7	<0.05
GO:0046626	regulation of insulin receptor signaling pathway	3	<0.05
<b>Cellular component</b>			
GO:0012505	endomembrane system	9	<0.05
GO:0005576	extracellular region	47	<0.001
GO:0043292	contractile fiber	7	<0.001
GO:0005887	integral component of plasma membrane	27	<0.05
<b>Molecular function</b>			
GO:0046872	metal ion binding	37	<0.001
GO:0005212	structural constituent of eye lens	9	<0.001
GO:0046983	protein dimerization activity	17	<0.001
GO:0030246	carbohydrate binding	12	<0.01

The table indicates the number of genes in each list that are associated with the indicated GO term resulting from applying the significance cutoff of *p*-value (*p*) <0.05 and fold change >|1.5|. Yellow indicates up regulated terms and blue indicates down regulated terms.