

GO term	Description	P-value	FDR q-value	Enrichment (N, B, n, b)	Genes
GO:0006637	acyl-CoA metabolic process	1.36E-6	1.1E-2	6.63 (14414,34,639,10)	[+] <a href="#">Show genes</a>
GO:0035383	thioester metabolic process	1.36E-6	5.49E-3	6.63 (14414,34,639,10)	[+] <a href="#">Show genes</a>
GO:0006790	sulfur compound metabolic process	3.51E-6	9.42E-3	3.35 (14414,128,639,19)	[+] <a href="#">Show genes</a>
GO:0034032	purine nucleoside bisphosphate metabolic process	1.11E-5	2.23E-2	5.37 (14414,42,639,10)	[+] <a href="#">Show genes</a>
GO:0033865	nucleoside bisphosphate metabolic process	1.11E-5	1.79E-2	5.37 (14414,42,639,10)	[+] <a href="#">Show genes</a>
GO:0033875	ribonucleoside bisphosphate metabolic process	1.11E-5	1.49E-2	5.37 (14414,42,639,10)	[+] <a href="#">Show genes</a>
GO:0055088	lipid homeostasis	5.82E-5	6.69E-2	6.58 (14414,24,639,7)	[+] <a href="#">Show genes</a>
GO:0033554	cellular response to stress	6.07E-5	6.11E-2	1.98 (14414,422,639,37)	[+] <a href="#">Show genes</a>
GO:0006259	DNA metabolic process	1.87E-4	1.68E-1	2.09 (14414,302,639,28)	[+] <a href="#">Show genes</a>
GO:0030309	poly-N-acetyllactosamine metabolic process	2.42E-4	1.94E-1	8.06 (14414,14,639,5)	[+] <a href="#">Show genes</a>
GO:0030311	poly-N-acetyllactosamine biosynthetic process	2.42E-4	1.77E-1	8.06 (14414,14,639,5)	[+] <a href="#">Show genes</a>
GO:0008203	cholesterol metabolic process	2.71E-4	1.82E-1	5.26 (14414,30,639,7)	[+] <a href="#">Show genes</a>
GO:0006631	fatty acid metabolic process	2.91E-4	1.8E-1	2.92 (14414,108,639,14)	[+] <a href="#">Show genes</a>
GO:0002143	tRNA wobble position uridine thiolation	3.35E-4	1.93E-1	16.92 (14414,4,639,3)	[+] <a href="#">Show genes</a>
GO:0034227	tRNA thio-modification	3.35E-4	1.8E-1	16.92 (14414,4,639,3)	[+] <a href="#">Show genes</a>
GO:0033292	T-tubule organization	3.35E-4	1.69E-1	16.92 (14414,4,639,3)	[+] <a href="#">Show genes</a>
GO:0055092	sterol homeostasis	3.49E-4	1.65E-1	7.52 (14414,15,639,5)	[+] <a href="#">Show genes</a>
GO:0042632	cholesterol homeostasis	3.49E-4	1.56E-1	7.52 (14414,15,639,5)	[+] <a href="#">Show genes</a>
GO:1902652	secondary alcohol metabolic process	4.16E-4	1.76E-1	4.93 (14414,32,639,7)	[+] <a href="#">Show genes</a>
GO:0044255	cellular lipid metabolic process	6.08E-4	2.44E-1	1.85 (14414,390,639,32)	[+] <a href="#">Show genes</a>
GO:0034243	regulation of transcription elongation from RNA polymerase II promoter	6.68E-4	2.56E-1	6.63 (14414,17,639,5)	[+] <a href="#">Show genes</a>
GO:0006974	cellular response to DNA damage stimulus	7.78E-4	2.84E-1	2.04 (14414,266,639,24)	[+] <a href="#">Show genes</a>
GO:0010898	positive regulation of triglyceride catabolic process	8.11E-4	2.84E-1	13.53 (14414,5,639,3)	[+] <a href="#">Show genes</a>
GO:0010896	regulation of triglyceride catabolic process	8.11E-4	2.72E-1	13.53 (14414,5,639,3)	[+] <a href="#">Show genes</a>
GO:0030300	regulation of intestinal cholesterol absorption	8.11E-4	2.61E-1	13.53 (14414,5,639,3)	[+] <a href="#">Show genes</a>
GO:1904729	regulation of intestinal lipid absorption	8.11E-4	2.51E-1	13.53 (14414,5,639,3)	[+] <a href="#">Show genes</a>
GO:1904478	regulation of intestinal absorption	8.11E-4	2.42E-1	13.53 (14414,5,639,3)	[+] <a href="#">Show genes</a>
GO:0045723	positive regulation of fatty acid biosynthetic process	8.11E-4	2.33E-1	13.53 (14414,5,639,3)	[+] <a href="#">Show genes</a>
GO:0061365	positive regulation of triglyceride lipase activity	8.11E-4	2.25E-1	13.53 (14414,5,639,3)	[+] <a href="#">Show genes</a>
GO:0042304	regulation of fatty acid biosynthetic process	8.11E-4	2.17E-1	13.53 (14414,5,639,3)	[+] <a href="#">Show genes</a>
GO:0051004	regulation of lipoprotein lipase activity	8.11E-4	2.1E-1	13.53 (14414,5,639,3)	[+] <a href="#">Show genes</a>
GO:0051006	positive regulation of lipoprotein lipase activity	8.11E-4	2.04E-1	13.53 (14414,5,639,3)	[+] <a href="#">Show genes</a>
GO:0051716	cellular response to stimulus	9.56E-4	2.33E-1	1.61 (14414,644,639,46)	[+] <a href="#">Show genes</a>
GO:0006695	cholesterol biosynthetic process	9.84E-4	2.33E-1	8.20 (14414,11,639,4)	[+] <a href="#">Show genes</a>

## Note that only 38.15% of the terms you entered were used in the analysis

Species used: Danio rerio (Zebrafish)

The system has recognized 17175 genes out of 37782 gene terms entered by the user.

0 genes were recognized by gene symbol and 17175 genes by other gene IDs .

756 duplicate genes were removed (keeping the highest ranking instance of each gene) leaving a total of 16419 genes.

Only 14414 of these genes are associated with a GO term.

The GOrilla database is periodically updated using the [GO database](#) and other sources.

The GOrilla database was last updated on Jul 7, 2018

This results page will be available on this site for one month from now (until Aug 10, 2018 ). You can bookmark this page and come back to it later.

'P-value' is the enrichment p-value computed according to the mHG or HG model. This p-value is not corrected for multiple testing of 8046 GO terms.

'FDR q-value' is the correction of the above p-value for multiple testing using the Benjamini and Hochberg (1995) method.

Namely, for the  $i^{\text{th}}$  term (ranked according to p-value) the FDR q-value is  $(p\text{-value} * \text{number of GO terms}) / i$ .

**Enrichment (N, B, n, b)** is defined as follows:

N - is the total number of genes

B - is the total number of genes associated with a specific GO term

n - is the number of genes in the top of the user's input list or in the target set when appropriate

b - is the number of genes in the intersection

Enrichment =  $(b/n) / (B/N)$

**Genes:** For each GO term you can see the list of associated genes that appear in the optimal top of the list.

Each gene name is specified by gene symbol followed by a short description of the gene