

GO term	Description	P-value	FDR q-value	Enrichment (N, B, n, b)	Genes
<a href="#">GO:0004814</a>	arginine-tRNA ligase activity	2.58E-4	7.65E-1	15.68 (14414,3,919,3)	<a href="#">[+] Show genes</a>
<a href="#">GO:0003697</a>	single-stranded DNA binding	9.2E-4	1E0	3.44 (14414,41,919,9)	<a href="#">[+] Show genes</a>

## Note that only 37.64% of the terms you entered were used in the analysis

Species used: Danio rerio (Zebrafish)

The system has recognized 17460 genes out of 38291 gene terms entered by the user.

0 genes were recognized by gene symbol and 17460 genes by other gene IDs .

1041 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 2961 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  $(\text{p-value} * \text{number of GO terms}) / i$ .

**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