Supplementary Table 1. Annotation features of the 23 non-responsive genes

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| --- | --- | --- | --- | --- | --- |
| Sequence namea | Sequence length (nt) | #BlastX hitsb | Protein descriptionc | E-Value | #GO terms |
| Transcript\_AVA1\_35277 | 482 | 20 | PREDICTED: type-2 ice-structuring protein-like isoform X1 | 1.12809E-78 | 0 |
| Contig\_Tilapia\_90\_42 | 1200 | 20 | PREDICTED: steroidogenic acute regulatory protein, mitochondrial-like | 0.0 | 4 |
| Transcript\_AVA2\_28399 | 215 | 20 | PREDICTED: spermatogenesis-associated protein 6-like isoform X1 | 6.14314E-33 | 3 |
| Contig\_Tilapia\_90\_2464 | 318 | 20 | PREDICTED: serine/threonine-protein kinase MRCK beta-like | 7.65537E-63 | 11 |
| Transcript\_AVA3\_18623 | 241 | 17 | PREDICTED: S100P-binding protein-like isoform X1 | 1.67897E-39 | 2 |
| Transcript\_AVA1\_55478 | 318 | 20 | PREDICTED: ropporin-1-like protein-like isoform X1 | 4.89654E-64 | 4 |
| Transcript\_AVA3\_14200 | 287 | 20 | PREDICTED: proteasome subunit beta type-4-like | 9.87423E-36 | 5 |
| Contig\_Tilapia\_90\_2469 | 364 | 20 | ND5 gene product (mitochondrion) | 3.78555E-63 | 8 |
| Transcript\_AVA1\_4937 | 412 | 20 | PREDICTED: NADH dehydrogenase 1 alpha subcomplex subunit 4-like | 5.47508E-52 | 8 |
| Contig\_Tilapia\_90\_10837 | 594 | 20 | PREDICTED: homologous-pairing protein 2 homolog isoform X1 | 1.27384E-137 | 0 |
| Contig\_Tilapia\_90\_14414 | 151 | 20 | PREDICTED: high mobility group protein B2-like | 9.3765E-26 | 2 |
| Transcript\_AVA1\_52992 | 141 | 20 | PREDICTED: GTP-binding nuclear protein Ran-like, partial | 4.03386E-27 | 28 |
| Transcript\_AVA2\_4300 | 283 | 20 | PREDICTED: glyceraldehyde-3-phosphate dehydrogenase-like isoform X1 | 2.13313E-25 | 5 |
| Transcript\_AVA1\_9958 | 312 | 20 | PREDICTED: dynein light chain 4, axonemal-like | 8.27247E-42 | 2 |
| Transcript\_AVA3\_47460 | 196 | 20 | PREDICTED: dynein heavy chain 7, axonemal isoform X2 | 1.24682E-33 | 9 |
| Transcript\_AVA1\_28773 | 146 | 20 | sex-determining protein DMT | 2.53528E-22 | 0 |
| Contig\_Tilapia\_90\_2942 | 766 | 20 | collagen, type I, alpha 2 precursor | 1.01398E-124 | 2 |
| Contig\_Tilapia\_90\_9321 | 442 | 20 | PREDICTED: charged multivesicular body protein 2a-like | 1.11206E-51 | 2 |
| Transcript\_AVA2\_10563 | 138 | 20 | PREDICTED: 40S ribosomal protein S10-like | 2.60965E-22 | 9 |
| Transcript\_AVA1\_64597 | 135 | 0 | - | - | 0 |
| Contig\_Tilapia\_90\_23367 | 207 | 0 | - | - | 0 |
| Transcript\_AVA1\_66083 | 148 | 0 | - | - | 0 |
| Transcript\_AVA3\_28576 | 490 | 0 | - | - | 0 |

a Names of the sequences as they appear at <http://asahttp.drim.com/tilapia/tilapia_menu.php>.

b The number of BlastX hits was limited to 20.

c According to the best blast hit.