**Table S3:** Known zebrafish genes that form the core clock. The temporal pattern of each gene, as determined using RNA-seq, is compared to previously reported experimental data.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Previously reported experimental data | | | |  | RNA-seq of the pineal gland | | | Clock genes1 |
| References | Tissue |  | Expression peaks |  | Expression peaks | Temporal pattern | |
| [1] | Muscle | CT2 (DD) | |  | CT2 | Circadian | | *cry1a* |
| [2] | Eye | CT1-CT5 (LD, DD) | |  |  |  | |  |
| [2] | Eye | CT13 (LD) | |  | CT22-CT2 | Circadian | | cry1b |
| [2] | Eye | CT13-CT15 (DD) | |  | CT14 | Circadian2 | | *cry2a* |
| [1] | Muscle | CT14 (DD) | |  |  |  | |  |
| [3] | Larva | CT12 (LD) | |  |  |  | |  |
| [2] | Eye | CT13-CT15 (DD) | |  | CT14 | Circadian | | *cry2b* |
| [1] | Muscle | CT14 (DD) | |  |  |  | |  |
| [1] | Muscle | CT23 (DD) | |  | CT22 | Circadian2 | | *cry3* |
| [3] | Larva | CT21 (LD) | |  |  |  | |  |
| [2] | Eye | CT9 (LD,DD) | |  | CT10 | Circadian | | *cry4* |
| [1] | Muscle | CT23 (DD) | |  | CT22 | Circadian | | *per1a* |
| [1] | Muscle | CT1 (DD) | |  | CT22-CT2 | Circadian | | *per1b* |
| [4] | Brain, larva | CT22-24 (LD) | |  |  |  | |  |
| [5] | Larva | Not circadian | |  |  | Not circadian | | *per2* |
| [1] | Muscle | CT1 (DD) | |  | CT2 | Circadian | | *per3* |
| [6] | CNS, retina | CT0-CT4 (DD,LD) | |  |  |  | |  |
| [7] | Adult pineal gland | CT9-CT15(LD) | |  | CT10 | Circadian2 | | *bmal1a* |
| [8] | Eye | CT13-CT15 (LD, DD) | |  |  |  | |  |
| [8] | Eye | CT9-CT13 (LD, DD) | |  | CT10 | Circadian3 | | *bmal1b* |
| [7] | Adult pineal gland | CT15 (LD) | |  | CT10-CT14 | Circadian | | *bmal2* |
| [8] | Brain, eye | CT9-CT15 (DD,LD) | |  |  |  | |  |
| [9],[8] | Adult pineal gland, eye | CT9-CT15 (DD, LD) | |  | CT10 | Circadian | | *clock1a* |
| [1] | Muscle | CT14 (DD) | |  | CT10 | Circadian | *clock1b* | |
| [8] | Eye | CT13 (LD) | |  |  |  |  | |
| [8] | Eye | CT9-CT13 (DD, LD) | |  | CT14 | Circadian | | *clock2* |

1Gene nomenclature is according to Vatine et al. [10]

2These genes were also identified using the DNA microarray data

3*bmal1b* was identified as circadian by Fourier analysis with 85% true-positives

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