

**Table S10: Comparison of our light-induced genes with Gavriouchkina et al (2010) and Weger et al. (2011) studies.**

| <b>Light-indese</b> | <b>GeneID</b> | <b>Symbol</b>    | <b>description</b>  | <b>Experiment Source*</b> |
|---------------------|---------------|------------------|---|---------------------------|
| Fast Light-induced  | 30674         | tef              | thyrotroph embryonic factor                                 | G & W                     |
| Fast Light-induced  | 83776         | cry5             | cryptochrome 5  | G & W                     |
| Fast Light-induced  | 140633        | per2             | period homolog 2 (Drosophila)                               | G & W                     |
| Fast Light-induced  | 394039        | zgc:66475        | zgc:66475   | G & W                     |
| Fast Light-induced  | 406605        | zgc:85644        | zgc:85644   | G & W                     |
| Fast Light-induced  | 450011        | tspo             | translocator protein  | G & W                     |
| Fast Light-induced  | 565155        | hsp90a.2         | heat shock protein 90-alpha 2                               | G & W                     |
| Fast Light-induced  | 570063        | wdr76            | WD repeat domain 76   | G & W                     |
| Fast Light-induced  | 100004133     | ddb2             | damage-specific DNA binding protein 2                       | G & W                     |
| Slow Light-induced  | 573209        | cry2a            | cryptochrome 2a   | G & W                     |
| Fast Light-induced  | 373084        | hig1             | hypoxia induced gene 1                                      | G                         |
| Fast Light-induced  | 393253        | neil1            | nei endonuclease VIII-like 1 (E. coli)                      | G                         |
| Fast Light-induced  | 415184        | msrb3            | methionine sulfoxide reductase B3                           | G                         |
| Slow Light-induced  | 83780         | cry2b            | cryptochrome 2b   | G                         |
| Fast Light-induced  | 58215         | fech             | ferrochelatae   | W                         |
| Fast Light-induced  | 336492        | ptgds            | prostaglandin D2 synthase                                   | W                         |
| Fast Light-induced  | 373099        | guca1c           | guanylate cyclase activator 1C                              | W                         |
| Fast Light-induced  | 393167        | zgc:56136        | zgc:56136   | W                         |
| Fast Light-induced  | 393884        | sdha             | succinate dehydrogenase complex                             | W                         |
| Fast Light-induced  | 402986        | cry-dash         | cryptochrome DASH   | W                         |
| Fast Light-induced  | 436678        | arr3a            | arrestin 3a   | W                         |
| Fast Light-induced  | 436959        | blvrb            | biliverdin reductase B (flavin reductase (NADPH))           | W                         |
| Fast Light-induced  | 447914        | cox17            | COX17 cytochrome c oxidase assembly homolog (S. cerevisiae) | W                         |
| Fast Light-induced  | 541386        | xpc              | xeroderma pigmentosum                                       | W                         |
| Fast Light-induced  | 553695        | zgc:112255       | zgc:112255  | W                         |
| Fast Light-induced  | 553766        | zgc:109977       | zgc:109977  | W                         |
| Fast Light-induced  | 556393        | zgc:153679       | zgc:153679  | W                         |
| Fast Light-induced  | 556875        | tmem177          | transmembrane protein 177                                   | W                         |
| Fast Light-induced  | 558648        | selo             | selenoprotein O   | W                         |
| Fast Light-induced  | 562149        | sdhb             | succinate dehydrogenase complex                             | W                         |
| Fast Light-induced  | 563956        | si:busm1-265n4.4 | si:busm1-265n4.4  | W                         |
| Fast Light-induced  | 568061        | napepld          | N-acyl phosphatidylethanolamine phospholipase D             | W                         |

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|---------------------|---------------|-------------------|---|---------------------------|
| Fast Light-induced  | 568835        | slc27a6           | solute carrier family 27 (fatty acid transporter)     | W                         |
| Fast Light-induced  | 678653        | unc119b           | unc-119 homolog b (C. elegans)                        | W                         |
| Fast Light-induced  | 751701        | zgc:153154        | zgc:153154  | W                         |
| Fast Light-induced  | 768159        | si:ch211-195b13.1 | si:ch211-195b13.1                                     | W                         |
| Fast Light-induced  | 100003670     | sepx1b            | selenoprotein X                                       | W                         |
| Slow Light-induced  | 30077         | rbp4              | retinol binding protein 4                             | W                         |
| Slow Light-induced  | 58099         | arntl2            | aryl hydrocarbon receptor nuclear translocator-like 2 | W                         |
| Slow Light-induced  | 352915        | sepw1             | selenoprotein W                                       | W                         |
| Slow Light-induced  | 352927        | clock3            | clock homolog 3 (mouse)                               | W                         |
| Slow Light-induced  | 492783        | dhrs13            | dehydrogenase/reductase (SDR family) member 13        | W                         |
| Slow Light-induced  | 559626        | crtac1a           | cartilage acidic protein 1a                           | W                         |
| Slow Light-induced  | 724003        | zgc:136474        | zgc:136474  | W                         |

\* G were obtained from Gavriouchkina et al(2010)[36].

W were obtained from Weger et al(2011)[37].