**Table S2.** Detailed information of Japanese yellow eels used in this study.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sample name | Sex | Body length (mm) | Body weight (g) | Gonadosomatic index (GSI) | Ocular index (OI) | Fin-index (FI) | Skin coloration | Application | Source |
| Y-M1 | Male | 446 | 118 | 0.04 | 2.61 | 3.99 | Gray on the back and pectoral fins; yellow/white on the belly | RT-qPCR | Bought from Pingtung |
| Y-M2 | Male | 463 | 126 | 0.06 | 3.28 | 4.42 | Gray on the back and pectoral fins; yellow/white on the belly | RT-qPCR | Bought from Pingtung |
| Y-M3 | Male | 512 | 183 | 0.07 | 2.71 | 4.14 | Gray on the back and pectoral fins; yellow/white on the belly | RT-qPCR | Bought from Pingtung |
| Y-M4 | Male | 480 | 166 | 0.09 | 3.61 | 4.58 | Gray on the back and pectoral fins; yellow/white on the belly | RT-qPCR | Bought from Pingtung |
| Y-M5 | Male | 438 | 114 | 0.07 | 3.16 | 4.56 | Gray on the back and pectoral fins; yellow/white on the belly | RT-qPCR | Bought from Pingtung |
| Y-M6 | Male | 504 | 203 | 0.10 | 3.23 | 4.27 | Gray on the back and pectoral fins; yellow/white on the belly | RT-qPCR | Bought from Pingtung |
| Y-M7 | Male | 479 | 155 | 0.09 | 3.47 | 4.80 | Gray on the back and pectoral fins; yellow/white on the belly | RT-qPCR | Bought from Pingtung |
| Y-M8 | Male | 506 | 222 | 0.05 | 4.19 | 4.68 | Gray on the back and pectoral fins; yellow/white on the belly | RT-qPCR | Bought from Pingtung |
| Y-M9 | Male | 557 | 238 | 0.10 | 3.96 | 4.70 | Gray on the back and pectoral fins; yellow/white on the belly | RT-qPCR | Bought from Pingtung |
| Y-M10 | Male | 562 | 245 | 0.10 | 3.85 | 4.68 | Gray on the back and pectoral fins; yellow/white on the belly | RT-qPCR | Bought from Pingtung |