**Table S4.** Nucleotide composition and skewness value for the complete mitochondrial genome (mtDNA) and the protein-coding genes (PCGs) of seven species members of the family Pangasiidae

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Species/Designation and GenBank** |  | **Length**  **(bp)** | **A**  **(%)** | **T**  **(%)** | **G**  **(%)** | **C**  **(%)** | **A+T**  **(%)** | **AT-skew** | **G+C**  **(%)** | **GC-skew** |
| 1 | *Pangasius mekongensis*a  (Pmek-PNST-VN), Vietnam  GenBank: MZ272451) | mtDNA | 16,462 | 30.66 | 25.31 | 15.56 | 28.47 | 55.97 | 0.096 | 44.03 | −0.293 |
| PCGs | 11,421 | 28.65 | 26.99 | 15.32 | 29.04 | 55.64 | 0.030 | 44.36 | −0.309 |
| 2 | *Pangasius krempfi*a  (Pkre-VNAG-VN), Vietnam  GenBank: MZ272453) | mtDNA | 16,475 | 30.48 | 25.87 | 15.71 | 27.94 | 56.35 | 0.082 | 43.65 | −0.281 |
| PCGs | 11,421 | 28.36 | 27.84 | 15.47 | 28.33 | 56.20 | 0.009 | 43.80 | −0.294 |
| 3 | *Pangasius larnaudii*  (Plar-(by MiyaJP)-JP), Japan  GenBank: AP012018 | mtDNA | 16,471 | 30.57 | 25.48 | 15.76 | 25.48 | 56.05 | 0.091 | 43.95 | −0.283 |
| PCGs | 11,421 | 28.50 | 27.42 | 15.45 | 27.42 | 55.92 | 0.019 | 44.07 | −0.299 |
| 4 | *Pangasius pangasius*  (Ppan-Odesha-IN), India  GenBank: KX950698 | mtDNA | 16,472 | 30.51 | 25.11 | 15.67 | 28.72 | 56.05 | 0.096 | 43.95 | −0.297 |
| PCGs | 11,421 | 28.37 | 26.89 | 15.41 | 29.33 | 55.26 | 0.027 | 44.74 | −0.311 |
| 5 | *Pangasius sanitwongsei*  (Psan-Lancang-CN), China  GenBank: MN809630 | mtDNA | 16,536 | 30.96 | 26.02 | 15.38 | 27.62 | 56.05 | 0.088 | 43.95 | −0.278 |
| PCGs | 11,427 | 28.96 | 27.98 | 15.10 | 27.94 | 56.94 | 0.017 | 43.06 | −0.298 |
| 6 | *Pangasianodon hypophthalmus*a  (Phyp-CTIBT-VN), Vietnam  GenBank: MZ272452) | mtDNA | 16,523 | 30.90 | 26.56 | 15.30 | 27.24 | 57.46 | 0.076 | 42.54 | −0.281 |
| PCGs | 11,418 | 28.87 | 28.48 | 14.99 | 27.66 | 57.35 | 0.007 | 42.65 | −0.297 |
| 7 | *Pangasianodon gigas*  (Pgig-Mekong-TH) Thailand  GenBank: AY762971 | mtDNA | 16,533 | 30.42 | 25.50 | 15.66 | 28.42 | 55.92 | 0.088 | 44.08 | −0.289 |
| PCGs | 11,418 | 28.32 | 27.30 | 15.43 | 28.95 | 55.62 | 0.018 | 44.38 | −0.305 |
|  | Mean value | mtDNA |  | 30.64 | 25.80 | 15.58 | 27.74 | 56.44 | 0.086 | 43.32 | −0.281 |
|  | PCGs |  | 28.58 | 27.56 | 15.31 | 28.38 | 56.14 | 0.018 | 43.86 | −0.298 |

*Note:* a Species of this study; mtDNA: complete mitochondrial genome; PCGs: protein-coding genes. For sequence designation, see Table S2.