**Table S1** Database ID of the sequences used in this study.

|  |  |  |
| --- | --- | --- |
| Species | Gene | Accession number |
| *Poecilia formosa**Takifugu rubripes**Oryzias latipes**Gasterosteus aculeatus**Tetraodon nigroviridis**Oreochromis niloticus**Nematostella vectensis**Homo sapiens**Mus musculus**Gallus gallus* | GATA2aGATA2bGATA2aGATA2bGATA2aGATA2bGATA2aGATA2bGATA1GATA2aGATA2bGATA3GATA4GATA5GATA6GATA1GATA2aGATA2bGATA3GATA4GATA5GATA6GATAGATA1GATA2GATA3GATA4GATA5GATA6GATA1GATA2GATA3GATA4GATA5GATA6GATA1GATA2GATA3GATA4GATA5GATA6 | Ensembl: ENSPFOT00000003754Ensembl: ENSPFOT00000003221Ensembl: ENSTRUT00000035095Ensembl: ENSTRUT00000025931Ensembl: ENSORLT00000001689Ensembl: ENSORLT00000009689Ensembl: ENSGACT00000012700Ensembl: ENSGACT00000001029Ensembl: ENSTNIT00000010303Ensembl: ENSTNIT00000017851Ensembl: ENSTNIT00000014247Ensembl: ENSTNIT00000006468Ensembl: ENSTNIT00000019696Ensembl: ENSDARG00000017821Ensembl: ENSTNIT00000018102Ensembl: ENSONIT00000025596Ensembl: ENSONIT00000023989Ensembl: ENSONIT00000025651Ensembl: ENSONIT00000022612Ensembl: ENSONIT00000017057Ensembl: ENSONIT00000000582Ensembl: ENSONIT00000011829GenBank: AY465174.1GenBank: AAH09797.1GenBank: AAH51272.1GenBank: XP\_005252500.1GenBank: AAI43480.1GenBank: NP\_536721.1GenBank: NP\_005248.2GenBank: NP\_032115.1GenBank: NP\_032116.4GenBank: P23772.1GenBank: NP\_032118.2GenBank: NP\_032119.2GenBank: NP\_034388.2GenBank: NP\_990795.1GenBank: NP\_001003797.1GenBank: NP\_001008444.1GenBank: NP\_001280035.1GenBank: NP\_990752.1GenBank: NP\_990751.1 |