**Table S1** **Mitochondrial genome information of Anura species from GenBank**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Species | GenBank accession no. | Family | Length(bp) | Reference |
| *Babina holsti* | NC\_022870 | Ranidae | 19113 | *Kakehashi et al., 2013* |
| *Babina subaspera**Bombina bombina**Bombina maxima* | NC\_022871EU115993EU789363 | RanidaeBombinatoridaeBombinatoridae | 1852517154 18388 | *Kakehashi et al., 2013**Pabijan et al., 2008*Unpublished  |
| *Buergeria buergeri* | AB127977 | Rhacophoridae | 19959 | *Sano et al., 2004* |
| *Euphlyctis hexadactylus* | NC\_014584 | Dicroglossidae | 20280 | *Alam et al., 2010* |
| *Fejervarya cancrivora* | EU652694 | Dicroglossidae | 17843 | *Ren et al., 2009* |
| *Fejervarya limnocharis* | AY158705 | Dicroglossidae | 17717 | *Liu et al., 2005* |
| *Fejervarya multistriata**Hyla chinensis**Hyla japonica* | KR071859AY458593AB303949 | DicroglossidaeHylidaeHylidae | 177501818019519 | *Huang & Tu, 2016**Zhang et al., 2005a**Igawa et al., 2008* |
| *Hoplobatrachus rugulosus* | NC\_019615 | Dicroglossidae | 20309 | *Yu et al., 2012* |
| *Hoplobatrachus tigerinus* | NC\_014581 | Dicroglossidae | 20462 | *Alam et al., 2010* |
| *Mantella madagascariensis* | AB212225 | Mantellinae | 22874 | *Kurabayashi et al., 2008* |
| *Occidozyga martensii* | GU177877 | Dicroglossidae | 18321 | *Li et al., 2014a* |
| *Polypedates megacephalus* |  MH936677 | Rhacophoridae | 19952 | This study |
| *Rana amurensis**Rana kunyuesis* | MF370348NC\_024548 | RanidaeRanidae | 2057122255 | Unpublished *Li et al., 2014b* |
| *Rhacophorus dennysi* | KT191129 | Rhacophoridae | 17572 | *Huang et al., 2016* |
| *Rhacophorus schlegelii* | AB202078 | Rhacophoridae | 21359 | *Sano et al., 2005* |