

**Additional file 4. Sampling sites and altitude distribution.** Samples of *Rana chensinensis* were collected from the Yaodu Town (105.45°E, 32.79°N) with an altitude of 604 m above sea level (a.s.l.). Samples of *R. kukunoris* were collected from the Zoige County (102.90°E, 33.58°N) with an altitude of 3,358 m a.s.l.

