



1 **Supplementary Figure S1.** Microscopic observations of *Cyclidium* sp. YH. a: Bright field. b: DAPI image.
2 c: Fluorescent micrograph after hybridization with archaea-specific probe (Arc915) for the endosymbiotic
3 methanogen of *Cyclidium* sp. YH. The scale bar represents 10 μm .

4

5

6