Supplementary data to the manuscript

"Catalytic reduction of NACs by Nano Fe_3O_4/Quinone composites in the presence of a novel marine exoelectrogenic bacterium under hypersaline conditions"

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Supplementary data consists of "Materials and methods" section and 5 figures.

Materials and methods

Preparation of Fe_3O_4 nanoparticles: 10.8 g $FeCl_3$•$6H_2O$ and 3.98 g $FeCl_2$•$4H_2O$ were dissolved in a three-necked flask (250 mL with 100 mL deionised water), bubbled with nitrogen for 20 min and mixed with magnetic stirring; Then, 20 mL NaOH (10M) was added dropwise within 30 min and maintained for 30 min; The obtained black solution was then heated to 90^{o}C in a water bath, reacted under vigorous stirring for 60 min and then allowed to cool to room temperature; The black products were washed with ethanol and deionized water three times and dried in a vacuum oven at 60 ℃ for following steps.

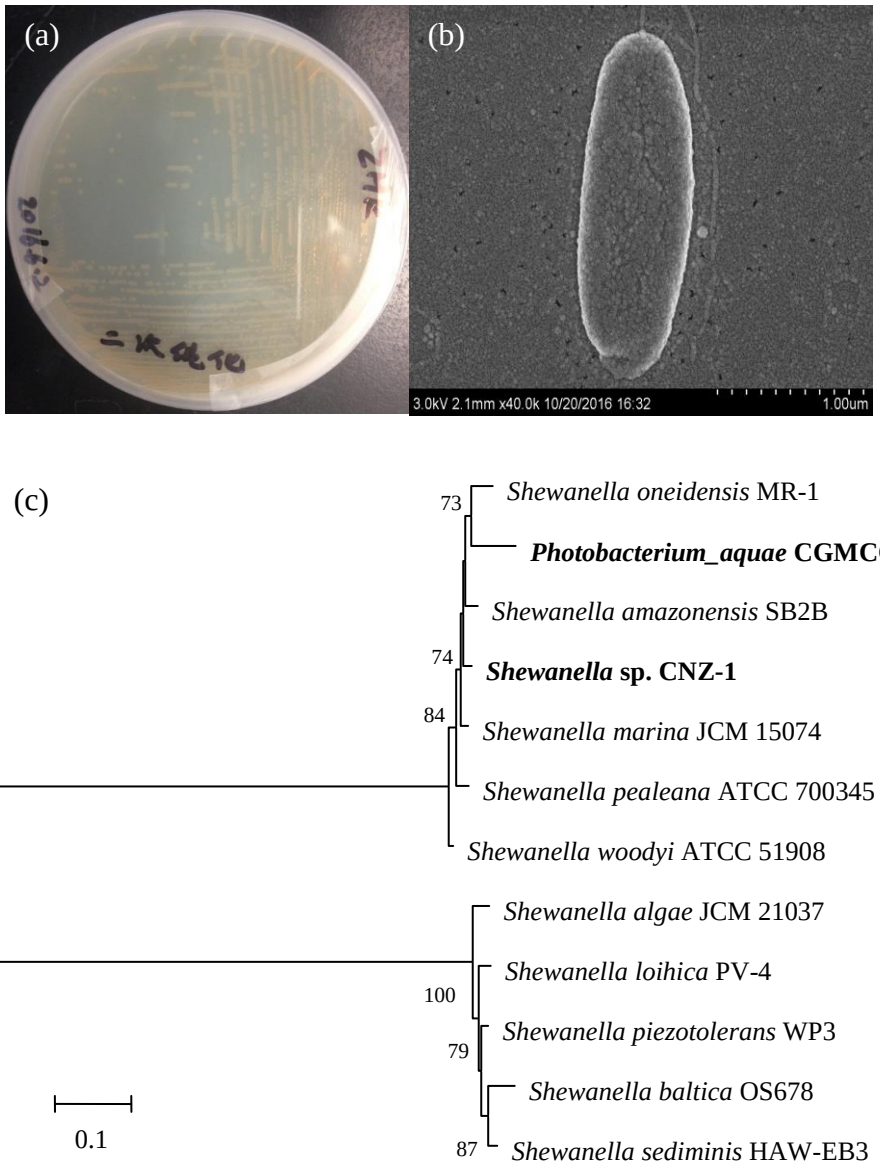

Fig. S1. Photograph (a), SEM photograph (b) and Phylogenetic tree (c) of CNZ-1.

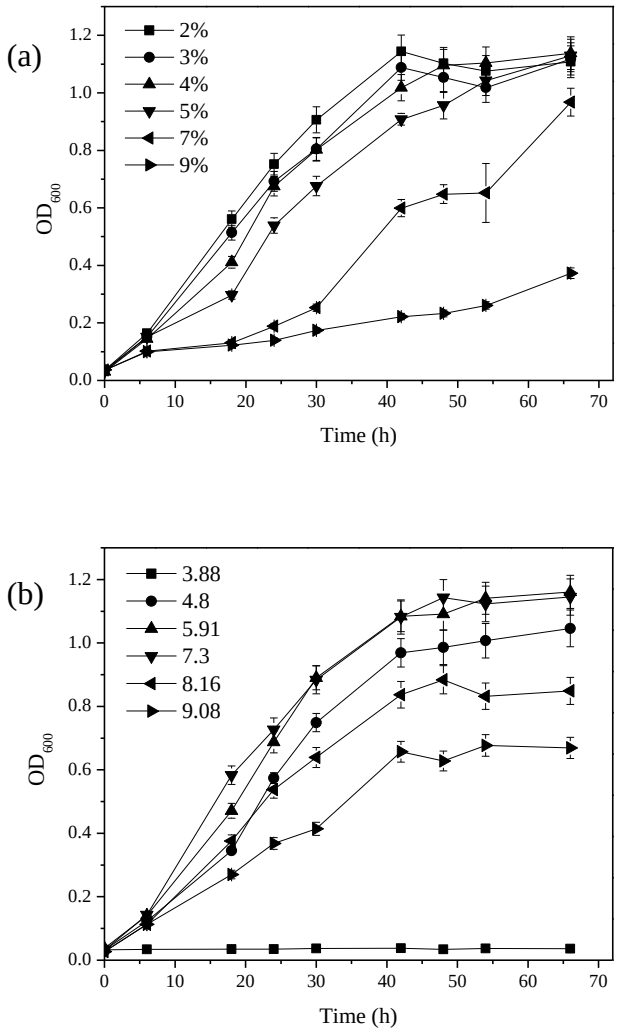

Fig. S2. Anaerobic growth of CNZ-1 in the presence of different NaCl concentration (a) and pH (b) in M2216EM at 30 ℃.

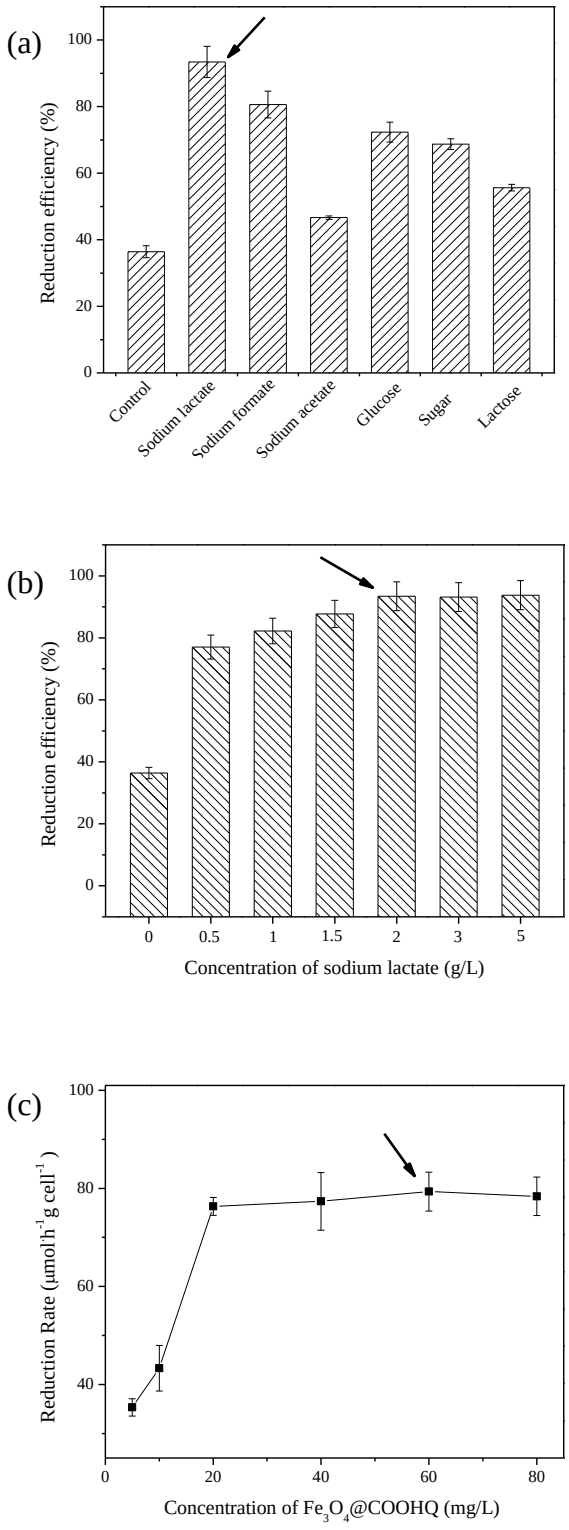

Fig. S3. Effects of carbon sources (a), sodium lactate concentration (b) and Fe_3O_4-COOHQ concentration (c) on NC reduction by strain CNZ-1.

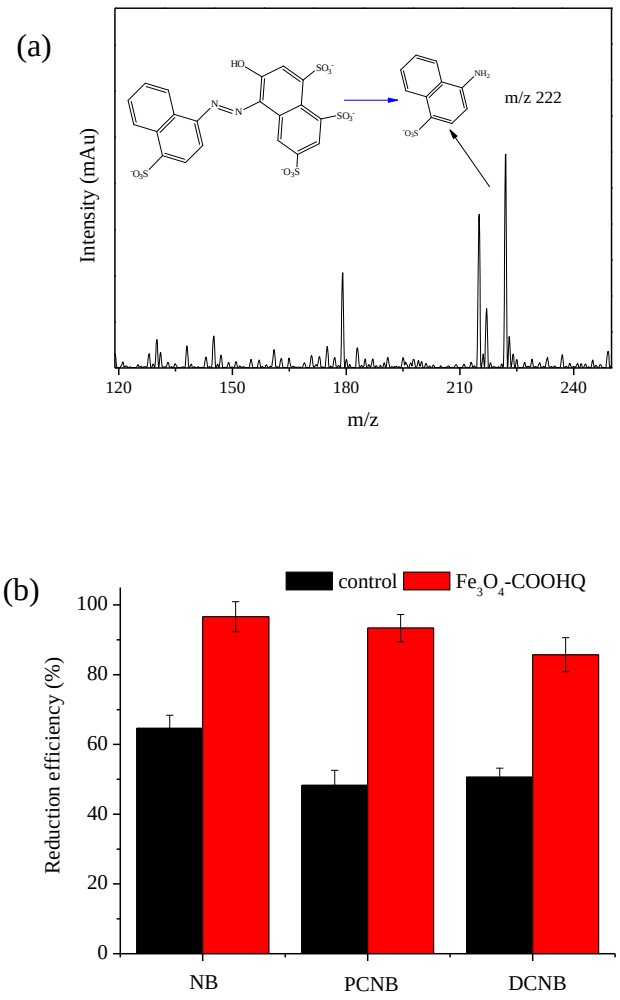

Fig. S4. Mass spectrum of NC bioreduction products (a), effects of Fe_3O_4-COOHQ on NB, PCNB and 2,5-DCNB reduction by strain CNZ-1 (b).

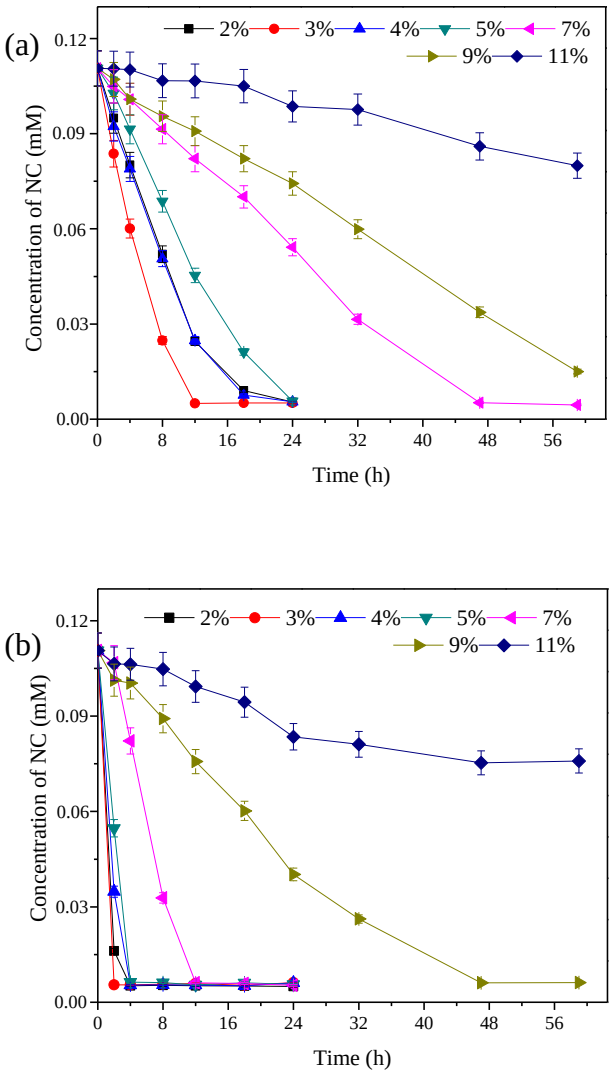

Fig. S5. Effect of NaCl (2-11%) on NC bioreduction in the absence (a)/presence (b) of Fe_3O_4-COOHQ.