

**Supplementary Table S6. Environmental samples contained H<sub>2</sub>S oxidizers and non-oxidizers**

Sample	cfu per mL or gram of sample	% of H <sub>2</sub> S-oxidizers
Farm	$1.2 \times 10^6 \pm 4.2 \times 10^5$	$38\% \pm 10\%$
Forest	$4.5 \times 10^5 \pm 8.7 \times 10^4$	$35\% \pm 7\%$
Lake	$260 \pm 43$	$27\% \pm 3\%$
Ocean	$1.3 \times 10^5 \pm 4.0 \times 10^4$	$44\% \pm 14\%$

LB agar plates were used to obtain colonies, and LB agar plates with 2% of NaCl and 10 mM MgSO<sub>4</sub> were used to culture marine bacteria. Colony forming units (cfu) are averages of at least three samples with standard deviations.