

Table S1: Quality control data of Real Time PCR analysis

Target	Slope	R²	Efficiency (%)	Detection limit (copies/g)
<i>Methanosaetaceae</i>	-4.162	0.994	73.879	1.53E+04
<i>Methanosarcinaceae</i>	-4.553	0.998	65.825	1.45E+04
<i>Methanobacteriales</i>	-4.262	0.998	71.647	1.18E+04
<i>Methanomicrobiales</i>	-3.908	0.998	80.246	1.08E+04
Anammox	-3.119	0.992	109.241	4.15E+04
AOB	-3.087	0.995	110.838	8.46E+04
NOB	-2.228	0.99	181.017	5.63E+04