Electronic Supplementary Material (ESI) for Green Chemistry. This journal is © The Royal Society of Chemistry 2023

Supplemental information

Table S1. Information about the pair of primers used in this study (sequences, melting temperature and amplification efficiency) for the *dszA*, *dszB*, *dszC* and *16S rRNA* genes.

| Genes | Primer sequences (5'-3') | Melting temperature | Amplification efficiency |
|----------|--------------------------|------------------------|-----------------------------|
| dszA | TGGGATTGATGCAGGCTACAT | 56.5°C | 2.05 |
| | GCCCCGCAGCCTTCAC | 60.3°C | |
| dszB | CCTGCTGGATCGCACACA | 58.1°C | 1.89 |
| | CGGGCTCCTGCAGCAA | 58.9°C | |
| dszC | TGTTCGGCTCGCAGGAA | 57.1°C | 1.99 |
| | CGTTCTGCGCGATTTGC | 55.4°C | |
| 16S rRNA | CGACCTGAGAGGGTGATC | 57.1°C | 1.89 |
| | ATAACCCGCTGGCAATACAG | 55.2°C | |



Fig. S1. Flow cytometry analysis of the dual staining with CFDA and PI of the population of *G. alkanivorans* strain 1B, from each steady state obtained with different initial sulfate concentrations (12 to 50 mg/L SO₄ using Na₂SO₄). Samples were collected in duplicate, and each was analyzed in triplicate.