

**Single-cell analysis reveals gene-expression heterogeneity in
syntrophic dual-culture of *Desulfovibrio vulgaris* with
*Methanosarcina barkeri***

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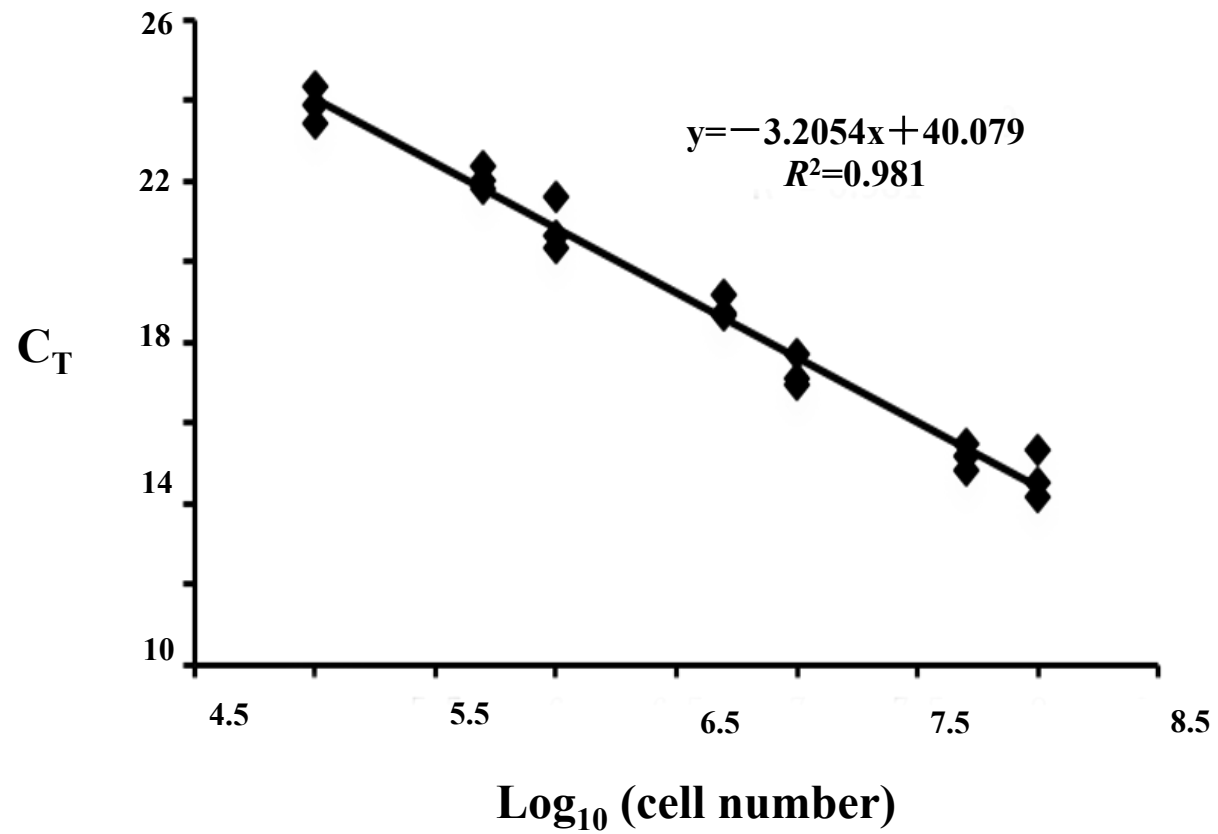
Running title: Single-cell analysis of syntrophic dual-culture

Supplementary materials available online:

Suppl. Fig. S1. Standard curve for qPCR threshold cycle (C_T) versus the logarithmic values (base 10) of the *D. vulgaris* cell number. Correlation coefficients (R^2) and correlation equation shown.

Suppl. Table S1. All RT-qPCR primers designed and evaluated for 9 genes in this study.

Suppl. Fig. 1



Suppl. Table S1. All RT-qPCR primers designed and evaluated for 9 genes in this study.

Gene ID	Gene name	Annotation	Pimer ID	Forward primer 5'-3'	Reverse primer 5'-3'
DVU1922	<i>hynA-1</i>	Periplasmic [NiFe] hydrogenase large subunit, isozyme 1	A	TCACGCCACAGAGCAGCTATAC	TCCCTTCAGGATGATCTCAAGC
			B	CAAGAACCCGCATACCCAGTT	AAGGTGATGAAGTTGGTGGTGC
			C	GTATCTGCACGACCACATCGTG	GATATGGATGACGCGATCTTCG
			D	ACATACATCCGCAACCTCGTTC	GATATGGATGACGCGATCTTCG
			E	GCTGCAAAGCCAAGACAGCTCC	TTCGATTCGGGTACACAGGGTC
			F	CCAAGCGCATCCAGGAATT	TGGTGCCACCGTACTGTGTC
			G	AAGCGCATCCAGGAATTCAC	TGGTGCCACCGTACTGTGTC
DVU0533		Hmc operon protein 4	A	CTACACCCTGCACGAGTTCATG	TGAGGAAGAGCCAGTAACCCAC
			B	CTACACCCTGCACGAGTTCATG	GGAAGAGCCAGTAACCCACGTA
			C	GCAATCTACACCCTGCACGAGT	AGGAAGAGCCAGTAACCCACGT
			D	TGGATCAGGCAATCTACACCCT	GGAAGAGCCAGTAACCCACGTA
			E	CAATCTACACCCTGCACGAGT	GAGGAAGAGCCAGTAACCCAC
			F	CAATCTACACCCTGCACGAGT	CGGTGAGGAAGAGCCAGTA
			G	ATCGAATGGATGGAAGTTCGG	GCGAGAATCTGATTGTCCGGTG
DVU2402	<i>hdrA</i>	Heterodisulfide reductase subunit A	A	ATCGAATGGATGGAAGTTCGG	AGGACAGGCATAGTGC GTTGA
			B	ATCGAATGGATGGAAGTTCGG	AGGACAGGCATAGTGC GTTGA
			C	GGCGAAACTCGACAAGACCTT	GATGTTACCCTGAAAGTTGCC
			D	ATGGCGAAACTCGACAAGACC	GATGTTACCCTGAAAGTTGCC
DVU0145		Response regulator	A	TCATCATCTGAGCGGACA	GCGTTCGTAGACGTTTTTCGA
			B	ATGCTGCGGTTCATCATCCT	AGGCGTTCGTAGACGTTTTTC
			C	CCAGCGACTATCTGCTCAAACC	TTTTGCCTCCCCTTCTTCG
			D	ACGATGCTGCGGTTCATCAT	TTTTGCCTCCCCTTCTTCGA
DVU0148		Lipoprotein	A	ATGCTCTGCACCTTCTCGGTA	TCATGAAGCGGAGCGGATACAC
			B	TCAGCAGAACATCGACAGGCA	TACCGAGAAGGTGCAGAGCAT
			C	ACGAAGGCCAACATCGTGA	TACCGAGAAGGTGCAGAGCAT
			D	TTCTCGATGCCGATCATACA	TCATGAAGCGGAGCGGATACAC
DVU0149		hypothetical protein	A	CAAGTTCGGCAACGTCGACTAC	AGATCCAGCGAACGACCTTCTC
			B	TCGGCAACGTCGACTACAAAC	TAGATCCAGCGAACGACCTTTC
			C	CAAGTTCGGCAACGTCGACTA	TAGATCCAGCGAACGACCTTTC
			D	GGTGCAGCGACCTACACATACA	ATCTGAACGCCCTGAACCATG
			E	TCGTAGAGGCTATCCTGCATGA	GCAACGAAAAGGCTCACATCTC
DVU0600	<i>ldh</i>	L-lactate dehydrogenase	A	GCATCGTAGAGGCTATCCTGCA	GGCAACGAAAAGGCTCACATCT
			B	GCATCGTAGAGGCTATCCTGCA	GGCAACGAAAAGGCTCACATCT
			C	TCGTAGAGGCTATCCTGCATG	GGCAACGAAAAGGCTCACATCT
			D	GCAGGGGCGAAGCAGATG	GCACGTCGACACCCAGGA
			E	TCCTGCATGATGAGCACAGCGT	ATCCAGCACCTCTTCGATGCCA
			F	CATCGTAGAGGCTATCCTGCA	GCAACGAAAAGGCTCACATCTC
			G	AAGCAGATGCCCGGTCAGT	CATGGGTGAGGACATCGACG
			H	ATGAACAGGATAGCCGTCA	GGCGTCTATGAGAACGATG
			I	TGCATGATGAGCACAGCGT	GCATCCAGCACCTCTTCGAT
			A	AGATACGCATGAAGATCGGCA	GGTCTGTATCTTGCGGATGTCC
			B	GCCGTCATCTTCATCAACCAG	GGTCTGTATCTTGCGGATGTCC
DVU1090	<i>recA</i>	Recombinase A	C	ATCGTGAAGAACAAGGTCGCC	AAGGTGTTTCGATGAGCTTGGC
			D	CATTGGAGACCGCTTTAGCAC	TCGTCCGACAGTTTCATGACC
			E	GGCAACGCACTCAAGTTCTACA	GCGACCTTGTCTTCACGATCT
			F	TTCGCCTTCGGTTCAGAGAGAC	ATGCCAAGGTGTTTCGATGAGC
			G	GCCGTCATCTTCATCAACCAG	TCTGTATCTTGCGGATGTCCA
			H	GCCGTCATCTTCATCAACCAG	TCCATACGGACGGAAGTGTAGA
			I	GCCGTCATCTTCATCAACCA	GTCTGTATCTTGCGGATGTCCA
			A	CTTAACACATGCAAGTCCGCG	TATTAGCGACCGTTTCCAGCC
			B	GCTTAACACATGCAAGTCCGCG	TATTAGCGACCGTTTCCAGCC
			C	CAACCCCTATTGCCAGTTGCT	GCCATGATGACTGACGTCGT
			D	GATGAGTCCGCGTCCATTAG	AGTGTGGCCGGTTCATCTCT