

1 **Table S2:** Features of primer pairs designed to target the 16S rRNA genes of VLD-1 and VLD-2 phylotypes.

Target microorganism	Primer			Product length (bp)	Non-target products (per mismatch)		
	Name	Sequence (5'→3')	<i>T_m</i> (°C)		0	1	2
Uncultured	682f	AGGCGAAAGCGGTTTCAA	60.5	153	0	4	26
<i>Chloroflexi</i> VLD-1	814r	ACTTAAAGCGTTAGCTTCGGCA	60.3				
Uncultured	585f	TCAACTGGGAGGAGTCATTCG	59.5	133	0	6	11
<i>Chloroflexi</i> VLD-2	697r	GAAACAGCCTAGAAAACCGCC	59.8				

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