Supplementary web material. Individual hybridization results of each of the probes with each SRP reference organism. Colored boxes indicate hybridization signals with $[I_P - (I_N - I_{NLB})] \times I_{PLB}^{-1}$ above 2.0. Green indicates hybridization to a SRP with a target sequence fully complementary to the probe. Yellow, red, and light blue labeled boxes depict hybridizations with target sequences having one, two, and three mismatches, respectively. Lila was used to indicate hybridizations to targets with more than three mismatches. For each of the observed mismatch hybridizations the position of the mismatch(es) within the 18mer duplex is shown. Number in brackets indicate that ambiguous nucleotides were present in the probe target sequences of the respective reference organism. Probes which were excluded from the SRP-PhyloChip due to insufficient specificity are listed separately at the end of the table. NS = reference organism is not sequenced at the probe target side.

	Sulfate-reducing prokaryotes - reference organisms, 16S rRNA gene sequence accession number																																								
Probe name	*Desulfovibrio cuneatus*, X99501	*Desulfovibrio aminophilus*, AF067964	*Desulfovibrio gabonensis*, U31080	*Desulfovibrio alcoholivorans*, AF053751	*Desulfovibrio termitidis*, X87409	*Desulfovibrio zosterae*, Y18049	*Desulfovibrio halophilus*, U48243	*Desulfovibrio longus*, S42854 X63623	"*Desulfovibrio aestuarii*", M37316	*Desulfovibrio profundus*, U90726	*Desulfomicrobium aspheronum*, U64865	*Desulfohalobium retbaense*, U48244	*Desulfotalea arctica*, AF099061	*Desulforhopalus vacuolatus*, L42613	*Desulfobulbus propionicus*, M34410	"*Desulfobotulus sapovorans*", M34402	*Desulfococcus multivorans*, M34405	*Desulfonema limicola*, U45990	*Desulfonema ishimotonii*, U45992	*Desulfobacterium indolicum*, AJ237607	*Desulfosarcina variabilis*, M34407	*Desulfofaba gelida*, AF099063	*Desulfofrigus oceanense*, AF099064	"*Desulfobacterium niacini*", U51845	*Desulfobacula toluolica*, X70953	*Desulfotignum balticum*, AF233370	*Desulfobacter halotolerans*, Y14745	*Desulfobacter latus*, M34414	*Thermodesulforhabdus norvegica*, U25627	*Desulfomonile tiedjei*, M26635	*Desulfobacca acetoxidans*, AF002671	*Desulfotomaculum aeronauticum*, X98407	*Desulfotomaculum geothermicum*, Y11567	*Desulfotomaculum australicum*, M96665	*Desulfotomaculum thermobenzoicum*, Y11574	*Desulfotomaculum acetoxidans*, Y11566	*Desulfotomaculum halophilum*, U88891	*Desulfosporosinus orientis*, Y11570	*Thermodesulfovibrio islandicus*, X96726	*Thermodesulfobacterium mobile*, AF334601	*Archaeoglobus veneficus*, Y10011
NONSENSE																																									
EUB338																																									
EUB338II																																									
EUB338III																																									
SRB385	18					1			1, 16, (15)						(2, 15, 16)	7						7					7		18	7, 18	7			11	11		11		12	12	
SRB385Db							7		1, 7, 16 (15)	7			7	7	7 (2, 15, 16)		(15, 16)											5 (15, 16)		18						11		11, 18		7, 12	
DSTAL213																																									
DSTAL131																																									
DSTAL645														13-16																											
DSTAL835																																									
DSTAL732																																									
DSBB228																																									
DSBB660														10, 17, 18																								13, 17, 18			
DSFRG211																																									
DSFRG445																																									
DSFRG1030																																									
DCC209																																									
DSBMIN218																																									
DSBOSA445																																									
DSN658														4, 11, 16, 17			4 (1, 7, 8)		5	4	4	4	4		8, 17	8, 17				4, 17, (16)	8, 17, 18			4, 7, 16 18		4, 16-18	4, 16-18				

DSNISH179																																								
DSNISH442																		1, 4, 5, 18		1, 2, 18																				
DSNISH1001																																								
TDRNO1030																																								
TDRNO448																																								
TDRNO1443																																								
DSC193																																								
DSB674							2, 3			2, 3				11						11	11			11	11	11	11	11		11										
DSB1240																																								
DSB623a																						5						9												
DSB623b																										5	15													
DSBLA623																											9													
DSBM1239																										5, 12														
DSSDBM998																																								
DSSDBM194																																								
DSSDBM217																																								
DSSDBM1286																		12		10, 18																				
DSB230																											15	15												
DCC868																										8				(8, 9, 10)										
DSB220																12																								
DSB1030										6, 10, 11																														
DSB986									2, 3	2, 14, 17																													2, 3, 6	
DSB706												3																												
DSBAC355	7, 13						7, 13		7, 13 (10, 17)	7, 13			7	7	7														7, 10	7	7									
DSS658														11, 16, 17			(1, 7, 8)	4												17 (16)				7, 16-18	7, 16-18	16-18	16-18	8, 16, 17			
DSR651													1																											
DSB804																			3	3					3															
DSHRE830																																								
DSHRE995																																								

DSHRE1243																																									
DSVAE131																																									
DVHO831																																									
DVHO130																																									
DVHO733																																									
DVHO1424																																									
DVAA1111																																									
DVIG448																																									
DVIG468																																									
DVFABS153					2, 18																																				
DVFABS653																																									
DVFABS1351					16, 17																																				
DVLT1027																																									
DVLT131																																									
DVLT986												1, 4																													
DVSZ849																																									
DVDAPC872																																									
DVGL199					7																																				
DVGL445																																									
DVGL1151																																									
DVGL1421																																									
DVLVT139																																									
DVLVT175																																									
DSV651									1 (7, 8, 17, 18)					4, 11																11 (9, 17)											
DSV820		8		8	8		8	8	8 (10, 11)																																
DSM213																																									
DSM194																																									
DSV1292									18 (16)									8, 12, 15-18								13, 16-18															

DSV698		8							7					7, 18																					7, 18			8, 18			
DSV686																																						6, 14, 15			
LGC354a																																1, 13	1, 13	1, 13	1, 13	1, 13		1, 13			
LGC354b																																13	13	13	13	13	6, 13	13			
LGC354c																																									
DFMIa641																																				11, 18					
DFMIb726																																			6, 14						
DFMIc841																																									
DFMIc1012																																									
DFMIc1119																																									
DFMIc1138																																									
DFMId436																																									
DFMId625																																									
DFMId996																																									
DFMId1117																																									
DFACE438																																									
DFACE199																																									
DFACE995																																									
DFACE1028																																									
DFACE1436																																									
DFMIf126																																									
DFMII1281																																			13, 15						
DFMII1107																																									
DFMI227a																14																									
DFMI227b																					5, 12, 13														13	14					
TDSBM1282																																									
TDSBM353												5, 13																													
TDSBM652																																									
NTSPA714																																									

TDSV1326																																								
TDSV601																																								
TDSV849																																								
ARGLO37																																								
ARGLO276																																								
ARGLO576																																								
ARGLO972																																								
DSRHP185																																								
DSBACL143																													5, 17, 18 (6)											
DSBACL225																									4	4, 17	4, 17													
DSBACL317																									9	9	9		9, 10	9										
DSBACL1268																																								
DSBACL1434																					2, 3, 18	2, 3, 18				13														
DSMON95														11, 17, 18	17, 18	16-18	16-18	16-18	16-18	17, 18	16-18	17, 18	17, 18		11, 17, 18		11, 17, 18		17, 18		16-18										
DSMON1421																					12, 15, 16																			
DELTA495a									2																11	11	11 (4)							11			11			
DELTA495b														11		11						11																		
DELTA495c	2						2		2	2		2	2	2	2	2	2	2	2	2	2	2	2	2	2					2	2									
UNIV1389a+b+c																																								
ARCH917																																								
DFMI210																																								
DFMI229																16																								

Probes listed below were removed from the SRP microarray because they hybridized unspecifically to many reference organisms that have mismatches in the respective 16S rRNA gene-target side.

DVCL1350		14, 16				14, 16			16 (5, 8)	NS		14-16	15, 16		NS	14-16	NS	14-16	14-16	14-16	14-16	14-16		15, 16	14-16	14-16	14-16			14-16	5, 15, 16									
DVLVT194			15-18			6, 7, 13, 15, 17, 18	17, 18							14-18															6, 15-18											
DVLVT222	16, 17									15-17		15-18				15-17		15, 17				14-17												9, 17	9, 17					
DFMIf489									5, 10, 14, 15, 17							5, 10, 13, 15, 17 (14)						5, 10, 13, 15, 16		5, 10, 13, 15-17		5, 10, 15, 16				5, 10, 13-17	5, 10, 15, 16							10, 16, 17			

Perfect match
One mismatch
Two mismatches
Three mismatches
Four and more mismatches