

Supplement 1. Microbial parameters, culture medium and incubation details for SAS sampling.

Investigated parameter	Incubation Temperature (°C)	Incubation Time	Culture medium
Bacterial count 22°C	22	48 hours	PCA
Bacterial count 37°C	37	48 hours	PCA
Bacterial count 55°C	55	48 hours	PCA
Fungi/Yeast	22	5-7 days	Sabouraud glucose 4% chloramphenicol agar
Pseudomonaceae	37	18-48 hours	Cetrimide
Bacillus	30	24-48 hours	HiCrome Bacillus Agar
Clostridia	44	18-24 hours	mCP
Gram-negative bacteria	37	24 hours	MacConkey Agar
Actinomycetes	55	5-10 days	Starch casein agar
Enterococcus spp.	37	48 hours	Slanetz, Triphenyl tetrazolium chloride
DNA extraction for following qRT-PCR	-	-	Low Melting Agar

Supplement 2. Oligonucleotides and genomic DNA used in qRT-PCR assays.

Primers	Sequences (5'-3')	Target gene	Genomic DNA (ATCC®/DSM)	Ref
TotBac F TotBact R	ACTCCTACGGGAGGCAGCAG ATTACCGCGGCTGCTGG	16S rDNA Total Bacteria	<i>Desulfovibrio vulgaris</i> (29579D-5)	(41)
ITS1F ITS4	CTTGGTCATTTAGAGGAAGTAA TCCTCCGCTTATTGATATGC	18S rDNA Total Fungi	<i>Aspergillus fumigatus</i> (1022D-2)	(42)
ASAP1 ASAP2	CAGCGAGTACATCACCTTGG CCATTGTTGAAAGTTTAACTGATT	18S rDNA total <i>Aspergillus</i> spp.	<i>Aspergillus fumigatus</i> (1022D-2)	(43)
F R	ATGTGGTTTAATTCGAAGCA AGCTGACGACAACCATGCAC	Firmicutes 16S rRNA	<i>Clostridium acetobutylicum</i> (824D-5)	(44)
F R	CATGTGGTTTAATTCGATGAT AGCTGACGACAACCATGCAG	Bacteroidetes 16S rDNA	<i>Bacteroides fragilis</i> (25285D-5)	(45,46)
F R	AAAGGAAGATTAATACCGCATAA TGGACCGTGTCTCAGTTCC	<i>Clostridium</i> spp. 16S rRNA	<i>Clostridium acetobutylicum</i> (824D-5)	(44)
gacA1 gacA2	GBATCGGMGGYCTBGARGC MGYCARYTCVACRTCRCCTGSTGAT	Pseudomonaceae 16S rDNA	<i>Pseudomonas aeruginosa</i>	(47)
1080γF γ1202R	TCGTCAGCTCGTGTGTGA CGTAAGGGCCATGATG	Gamma-Proteobacteria 16S rRNA	<i>Shewanella oneidensis</i> (700550D)	(48)
Bsub5F Bsub3R	AAGTCGAGCGGACAGATGG CCAGTTTCCAATGACCCTCCCC	<i>Bacillus subtilis</i>	<i>Bacillus subtilis</i> (DSM 10)	(49)
-	-	<i>Legionella</i> mip gene	iQ-Check®Legionella Quantification Standard	(32)
AdF-1 AdR-1 probe 1	CWTACATGCACATCKCSGG CRGGGGCRAAYTGCACCAG CCGGGCTCAGGTACTCCGAGGCGTCCT	HAdV-4	Human Adenovirus 4; strain RI-67, (1572)	(27)
F R probe	TGCAAGTCGAACGCTGAAGCTGCGGCA GAATGTCTATCC ATCCACCCACCACAA	<i>Saccharopolyspora</i>	<i>Saccharopolyspora rectivirgula</i> (DSM43747)	(11)
F R probe	AATTGCGATAACGAACGAGACC GAGCCGATAGTCCCCCTAAGA CCTTAAATAGCCCGGCCCGCTTTT	<i>Thermomyces</i>	<i>Thermomyces lanuginosus</i> (DSM10635)	(11)