

**Table S1.** Accuracy of DNA extraction in accordance with Best Practice Recommendations for Internal Validation of DNA Extraction Methods [52].

Accuracy	VN141R	MD141	SD151	CVN291	MANUAL
Specificity (%) *	1	1	1	1	1
Sensibility (%) **	0.92	0.89	0.88	0.92	1
Repeatability (CV%) ***	19.9	16.0	19.8	13.8	24.6

\* Specificity=(True Negatives (D))/(True Negatives (D)+False Positives (B)); \*\* Sensibility=(True Positives (A))/(True Positives (A)+False Negatives (C)); \*\*\* CV%=(SD Yield DNA/mean Yield DNA)×100. The acceptability criteria were set at CV≤25%.

**Table S2.** Primers, probes and references [2,44,48,49,64].

Target	Forward Primer	Reverse Primer	Probe	Reference
<i>Propionibacterium spp.</i>	GCGTGAGTGACGGTAA TGGGTA	TTCGCACGGATCAAC CA	AGCGTTGTCCGGATTATTGGG CG	Elshi et al, 2000
<i>Corynebacterium spp.</i>	ACCATCGACGAAGGGT TTCT	TCACCGCTACACCAGG AATT	GGCGATAACGGGCATAACTTG	Piana et al., 2021
<i>Bacteroides vulgatus</i>	AAAGAAAGTTCCCTAGCG CTGC	GCTGGTTCTTTTACCG CCT	TCTGAAAAACGTGCTCAGGC	Valeriani et al., 2018
<i>Enterococcus spp.</i>	AGAAAATTCCAACGAA CTTG	CAGTGCTTACCTCCATTGGTTCTCTCCGAAATAGCTTT CATT	AGGGCTA	Valeriani et al., 2018
<i>Staphylococcus epidermidis</i>	CAACTCGATGCAAATC AGCAA	GAACCGCATAGCTCCC TGC	TACTACGGCTGGTGGAACTTCAA ATCGTTATCG	Chung et al., 2016
<i>Staphylococcus aureus</i>	ACACCTGAAACAAAGC ATCC	CGCTAACGCCACGTCCA TATT	TGGTCCTGAACCAAGTGCATT ACGA	Giampaoli et al., 2012
<i>Streptococcus salivarius</i>	GATGCCAAGGGTGAAG TTGT	GAGCCATCAGGATTCG TAGC	TGGCGAACAGACGATCAACGG	Giampaoli et al., 2012
<i>Streptococcus mutans</i>	CGGTTCTCAGCAAGAC ATGA	ATGGTACCCAATCCGC AATA	TGCAGTTAAGCTCTGCATAA AAGCGG	Giampaoli et al., 2012

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