

Diagnosis of parodontopathogenic bacteria with micro-IDent[®] plus stands up to comparison with gold standard!

In a recent study of the renowned Forsyth Institute (Boston, USA), the gold standard checkerboard method was compared to the **micro-IDent[®] plus** analysis from Hain Lifescience. In summary, the findings of both methods were nearly identical. For you as a dentist this means maximum security when analyzing subgingival samples with **micro-IDent[®] plus** and proves once again that **micro-IDent[®] plus** results can serve as an ideal basis for your patient-oriented treatment plan.

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Comparison between polymerase chain reaction-based and checkerboard DNA hybridization techniques for microbial assessment of subgingival plaque samples

Haffajee AD, Yaskell T, Torresyap G, Teles R, Socransky SS.

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Objectives: To compare 2 molecular methods, PCR with subsequent reverse hybridization (**micro-IDent[®] plus**), and checkerboard DNA-DNA hybridization, for identification of bacterial species in subgingival plaque samples.

Methods: Subgingival plaque samples were taken from 6 sites, 2 each with pocket depth <4 mm, 4-6 and >6 mm at baseline and 3 months post-therapy from 25 periodontitis subjects. One site in each pair was sampled first using 2 paper points (PCR assay) followed by a scaler sample (checkerboard technique). Sampling order was reversed for the second site of the pair. 2 healthy sites were sampled in 25 periodontally healthy subjects. The paper point and scaler samples were analyzed for their content of 13 bacterial species using the **micro-IDent[®] plus** assay or checkerboard DNA-DNA hybridization respectively. Similarity between samples evaluated using the 2 techniques was determined using regression analysis. Differences between health and periodontitis was determined using the Mann Whitney test.

Results: 50 samples from healthy and 300 samples from periodontitis subjects were evaluated using both techniques. Regression analysis indicated that 10/13 species showed significant positive correlations between counts determined by checkerboard analysis and levels determined by the PCR-based test. The highest rank correlations of 0.58, 0.49 and 0.46 were seen for *T. denticola*, *F. nucleatum* and *E. nodatum*, respectively ($p < 0.0001$). Both tests could distinguish between samples from healthy and periodontitis subjects. By checkerboard analysis 10/13 species were detected in significantly lower levels in the healthy subjects with the exception of *C. ochracea*, *C. sputigena* and *P. micros*. The PCR-based assay detected significantly lower levels of 12 test species in periodontally healthy subjects with the exception of *C. gingivalis*.

Conclusions: The detection patterns of 10/13 test species in subgingival plaque samples from periodontally healthy and periodontitis subjects were similar using the 2 molecular techniques. Supported by Hain Lifescience GmbH.

Successful periodontitis treatment is surprisingly simple!

Periodontitis and peri-implantitis are infectious diseases; their major cause is a unique group of periodonto-pathogenic bacteria. These bacteria actively destroy endogenous tissue, cause inflammatory reactions and in the end, are responsible for the loss of teeth and implants. To ensure long-term success, the therapy requires a targeted elimination of these bacteria.

Marker pathogen analyses with **micro-IDent®** and **micro-IDent® plus** supply data on quality and quantity of 11 periodonto-pathogenic species and their affiliation to so-called "bacterial complexes".

The test result represents the optimal basis for the design of an individual therapy and enables you, if required, to choose the correct adjuvant antibiotics as well as setting relevant recall-intervals. The result report is an extremely effective tool to help your patients understand why they require more extensive treatment.

Find out what the most current diagnostics can do for your day-to-day practice. Not only will you experience more successful clinical results (and healthier patients!), but your practice will also experience improved financial results as well. Conservative periodontal therapy is an excellent profit center for your practice. The end result will be healthier patients and healthier bottom-line results! You will be surprised, how rapid, easy, and safe success can be achieved!



▲ Sampling set

▲ Order form

At a glance: Marker Pathogen Analyses with **micro-IDent®** and **micro-IDent® plus**



Advantages

- quantitative, highly specific and sensitive marker pathogen analysis for optimization of therapeutic decisions and follow-up intervals
- choice of appropriate antibiotics ensures high rate of therapeutic success
- monitoring of therapeutic success
- early diagnosis of relapse during recall
- risk assessment for implantation failure prior to extensive prosthetic rehabilitation
- sampling sets free of charge

Indication

- when pocket depths > 4 mm with BOP (despite excellent oral hygiene)
- therapy-resistant, refractory adult periodontitis
- acute and progressive infections
- infections of osseointegrated implants

Products

micro-IDent®
for the detection of the 5 most important periodontopathogenic marker bacteria

micro-IDent® plus
for the detection of 11 periodontopathogenic marker bacteria

Sound
Diagnosis

Reliable
Therapy

Satisfied
Patients

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