

**Clinical application of a rapid and simple supersensitive
identification method for the identification of
Oral Candida species from oral rinse specimens**



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Materials and Methods

Seventy cases of oral candidiasis patients who were diagnosed and treated in the Department of Oral Medicine of Kagoshima University Hospital were investigated and their results of our new candida test using the PCR (polymerase chain reaction) method and the conventional old culture method were thus compared. Candida DNA were extracted from FTA Classic Card (Whatman®) impregnating oral rise specimens. In addition, PCR amplification was then performed using a modified method of KAMBE with the addition of Ampdirect (SIMADZ®). The products were then electrophoresed.

Abstraction DNA from *Candida species* and PCR

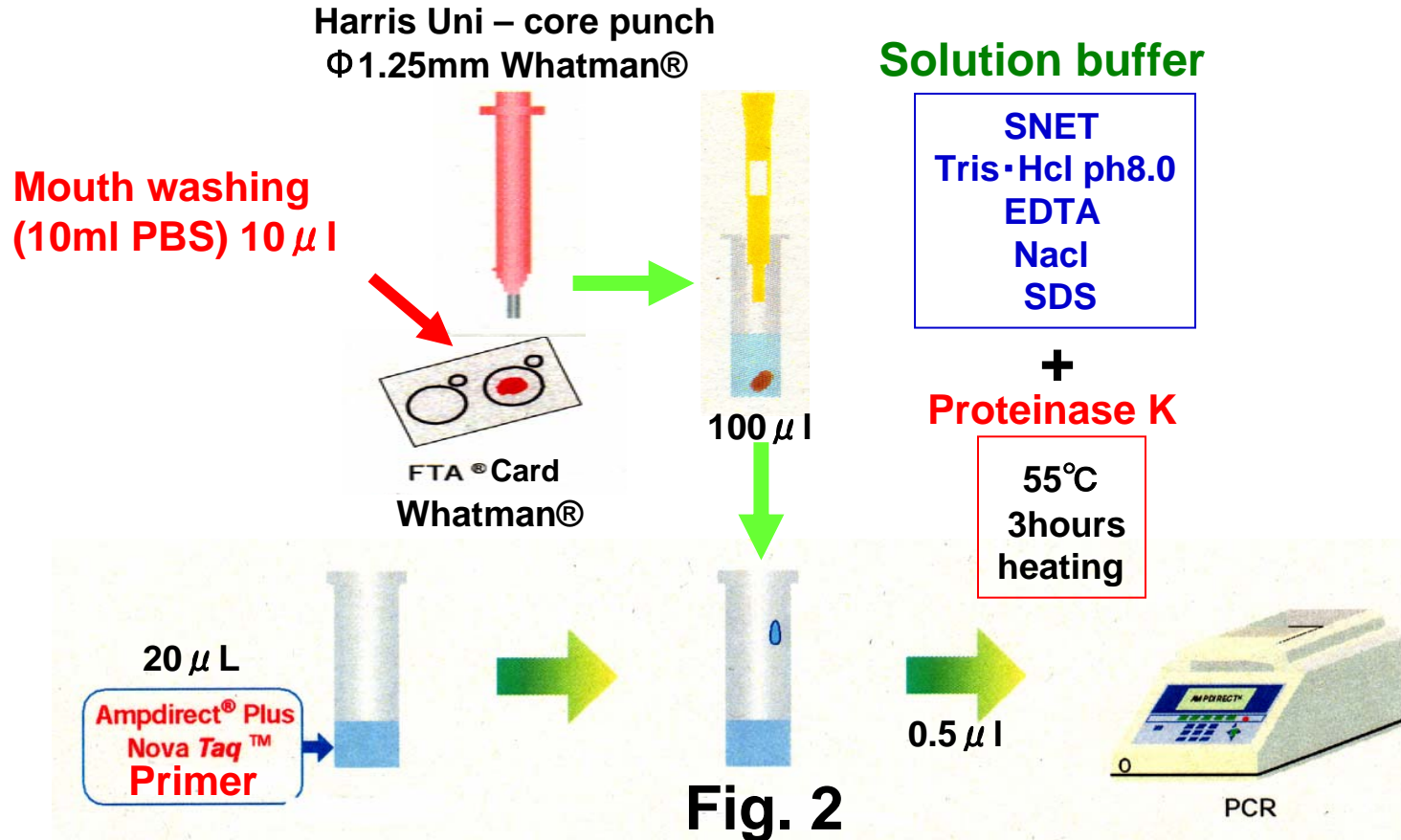
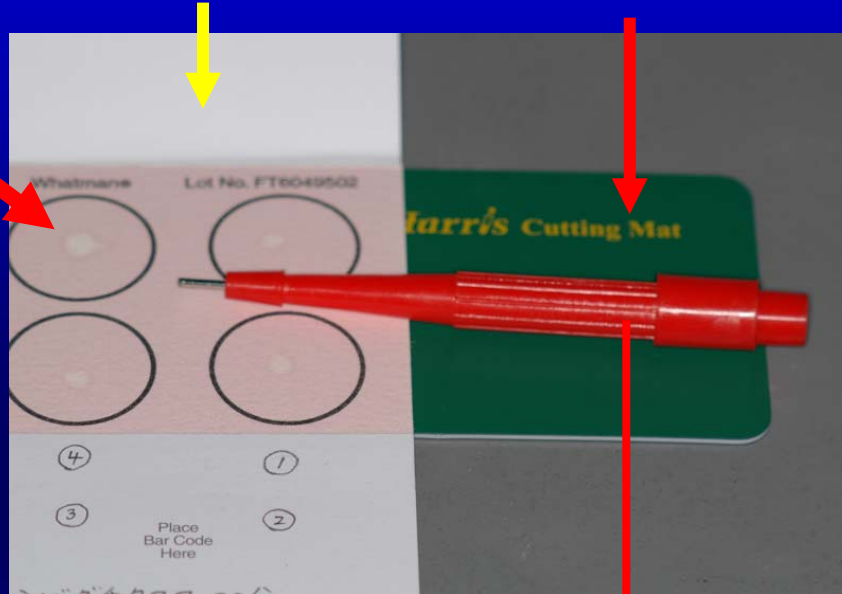


Fig. 3

**FTA - Card
Whatman®**

**Harris Uni – core
Φ 1.25mm Whatman®**

**Mouth washing
(10ml PBS) 10 μl**



Solution buffer

SNET

Tris·Hcl ph8.0 20mM
EDTA 5mM
Nacl 400mM
SDS 0.3%

+ Proteinase K= 100 μL

**Punched out and put
into solution buffer**

**Heated 55°C
three ours**

PCR

Fig. 6

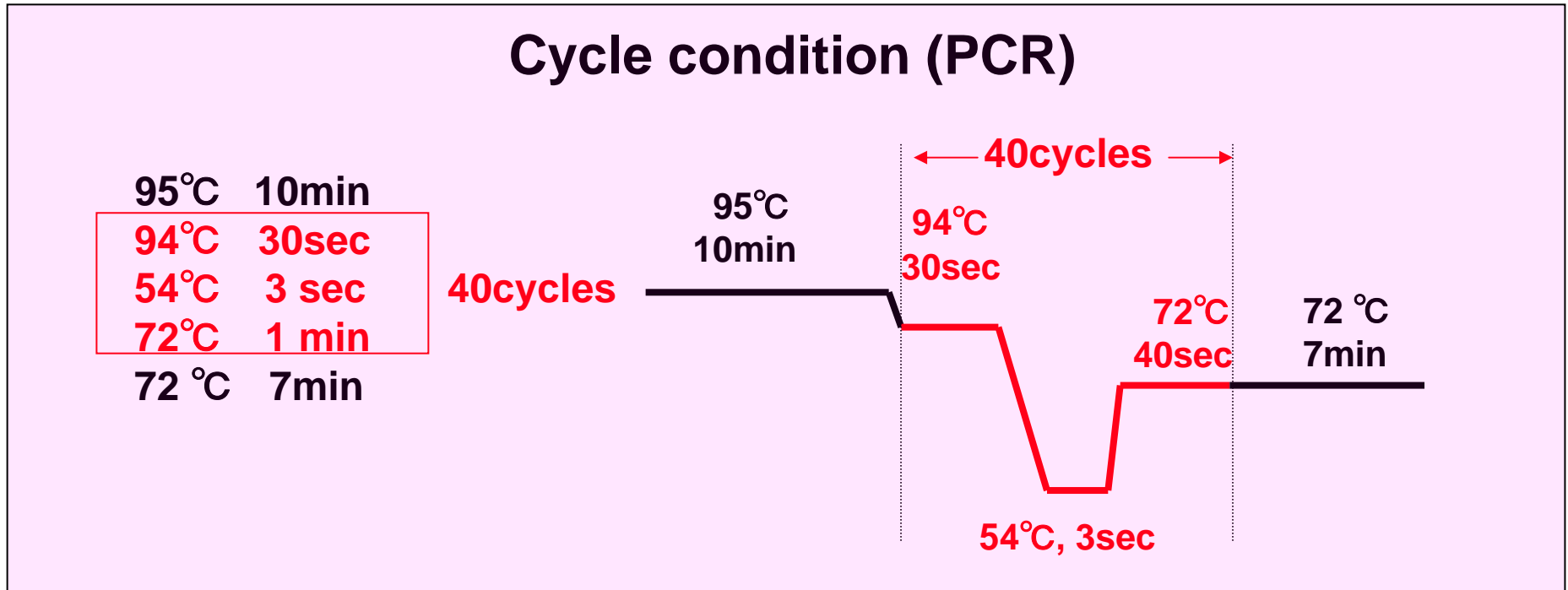
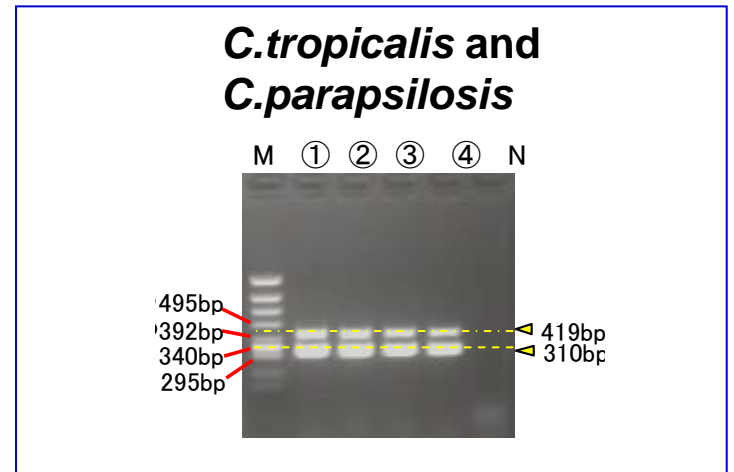
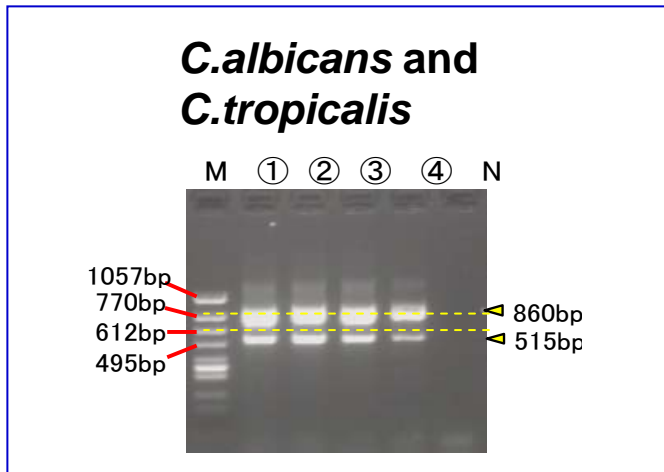
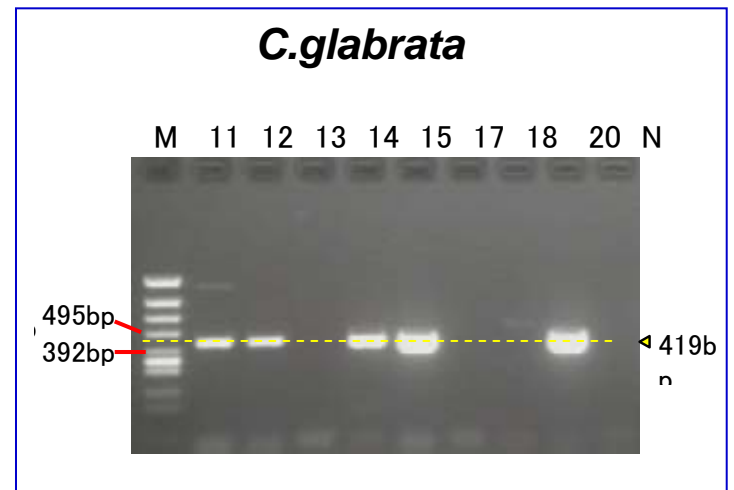
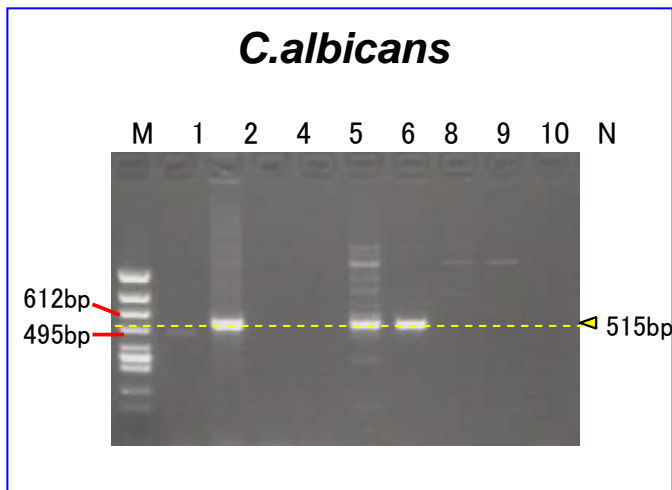


Fig. 7



M : Φ X174Hinc II digesta

N : No template

<i>Candida species</i>	Objective product (bp)
<i>C.albicans</i>	515
<i>C.tropicalis</i> I	318
<i>C.tropicalis</i> II	860
<i>C.parapsilosis</i> I	837
<i>C.parapsilosis</i> II	310
<i>C.glabrata</i>	419

Using this new method we were able to detect the kinds of *Candida species* from all the case of oral rinse which were also found to be culture positive based on conventional culture methods.