

# Handy Bio-Strand<sup>®</sup> System for SNP Typing of Multi-samples (Format I)

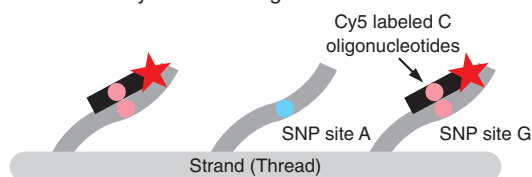


## Introduction

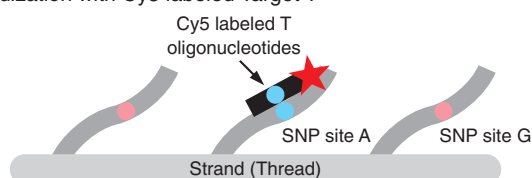
Multi-sample SNP analyses with Handy Bio-Strand<sup>®</sup> (Format I) enables simultaneous typing of an SNP on a set of genomic DNAs extracted from 96 people using two tips of Bio-Strand<sup>®</sup>. By fixing a PCR product of approximately 250 bp, which includes a target SNP on genomic DNA in the center region, on a Bio-Strand<sup>®</sup> and hybridizing with a complementary oligonucleotide, you can type an SNP.

The results were completely consisted with the sequence of the SNP site.

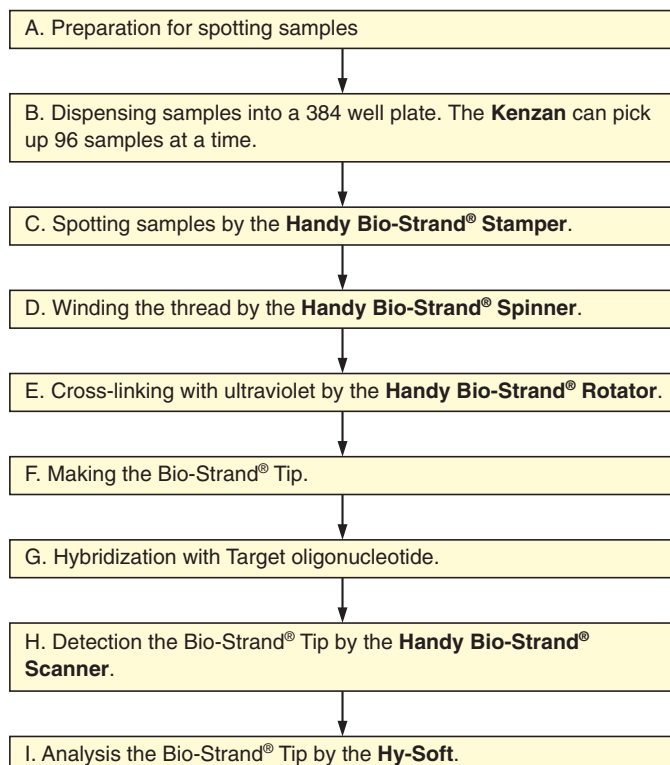
### A. Hybridization with Cy5 labeled Target C



### B. Hybridization with Cy5 labeled Target T



## Experimental Procedure



## Method

### A. Spotting samples preparation

**Table 1. Sequence of Spotting samples**

Marker oligonucleotide and PCR Primer (5'-3')

Marker	Cy5-CCTGGTGGTTGACTGATCACCATAA
Forward Primer	18mer (Sequence, not disclosed)
Reverse Primer	18mer (Sequence, not disclosed)

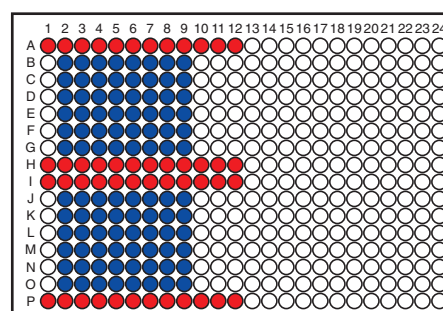
Takara La Taq (5U/μl)	0.5 μl
10xLa Buffer	10 μl
25mM MgCl <sub>2</sub>	10 μl
dNTP Mixture (2.5mM each)	8 μl
Genomic DNA	1 μg
Primer F	0.5 μM
Primer R	0.5 μM

Ultra Pure Water Up to 100 μl

94°C	3 min	} x30
94°C	20 sec	
60-50°C	30 sec	
72°C	1 min	
72°C	15 min	
4°C		

**Figure 1. PCR condition**

### B. Sample spot



● 150nM Cy5 labeled oligonucleotide marker (S Cy5 R4a)  
● PCR Products (App. 250bp)

**Figure 2. Spot Map**

### E. Cross-linking

**Table 2. Intensity of UV irradiation for probe immobilization**

UV energy	70 mJoules/cm <sup>2</sup>
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