



Biometrix Technology, Inc

www.bmtchip.com



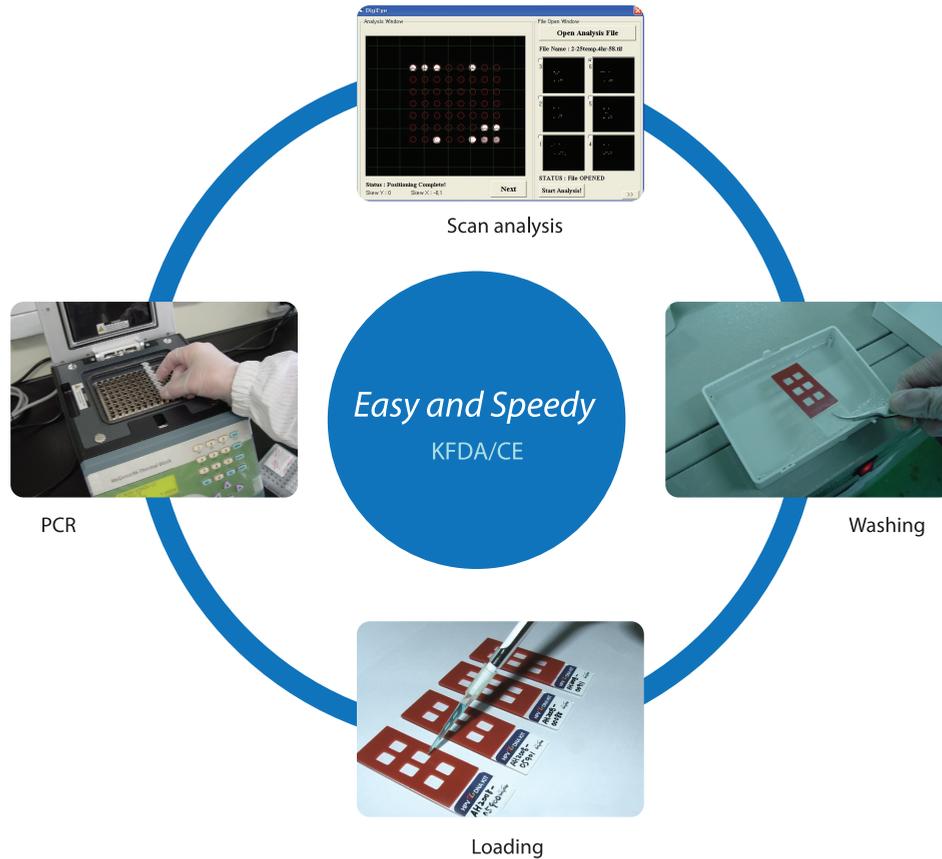
BMT-Br-02-2010-R0

BMT HPV 9G
DNA
KIT

Biometrix Technology, Inc



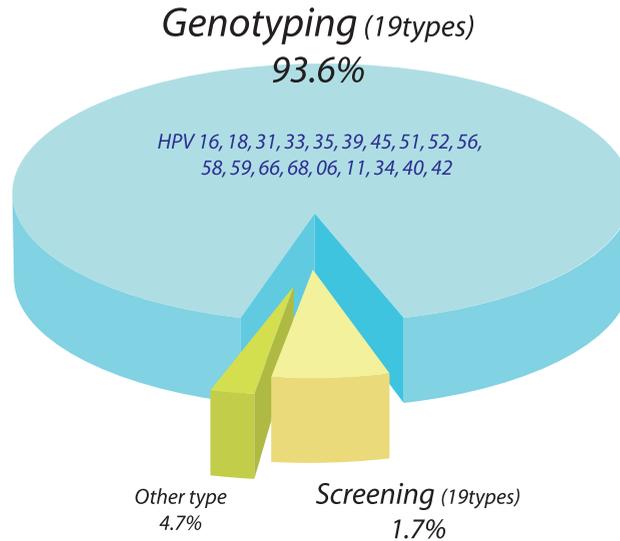
BMT 9G DNA Chip guarantees the most accurate and precise results in genotyping HPV virus because BMT 9G DNA Chip is the only DNA Chip which can be hybridized and washed at room temperature (25°C) to give the final data. It is long awaited top-of-the-line technology in the DNA Chip filed.



Slide 1 : BMT HPV 9G DNA KIT is easy to handle and fast to get data.

1. HPV DNAs are extracted and amplified via PCR
2. PCR products mixed with hybridization solution are loaded on 9G DNA Chip
3. 9G Chip was hybridized and washed at 25°C
4. Scan the Chip and automatic data analysis

Genotyping 93.6% of HPV



Screening types : 53, 54, 69, 73, 03, 10, 26, 27, 32, 43, 44, 55, 57, 61, 62, 67, 70, 72, 74

** HPV Hi-risk types are underline.*

Slide 2 : Number of HPV types by genotyping and screening

1. Most abundant 14 high-risk types and 5 low-risk HPV types which covers 93.6% of cancer cases are genotyped
2. Other 19 low-risk HPV types which covers 1.7% of cancer cases are screened
3. BMT HPV 9G DNA Chip provides informations of 95.3% HPVs detected on cancer cases

Proportion(%) of HPV Types

* HPV Hi-risk types are underline.

HPV	GSK	Merck
16	53.5%	54.5%
18	17.2%	11.3%
31	2.9%	3.8%
33	2.6%	2.1%
35	1.4%	1.3%
39	0.7%	0.8%
45	6.7%	5.2%
51	1.0%	0.8%
52	2.3%	2.3%
56	1.2%	1.1%
58	2.2%	1.7%
59	1.3%	1.1%
66		0.2%
68	0.6%	
59		
73	0.5%	0.5%
82	0.3%	0.3%
06		0.1%
11		0.1%
Other	1.2%	
X	4.4%	4.6%
Total detection of HPV using BMT HPV 9G DNA KIT	95.3%	95.1%

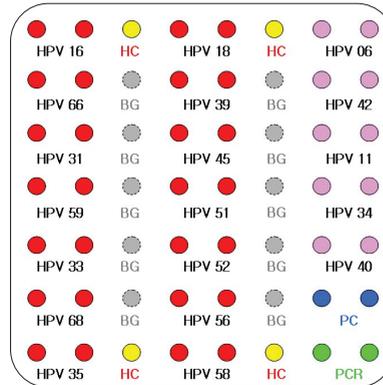
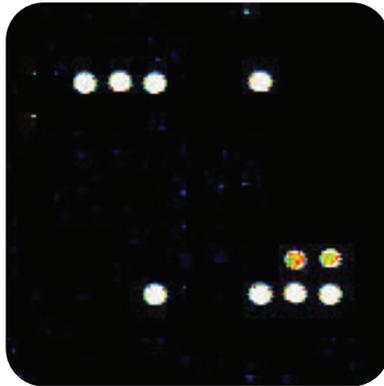
: Genotyping 19 Types in BMT HPV 9G DNA KIT

: Screening 19 Types in BMT HPV 9G DNA KIT

Slide 3 : Merck and GSK report on the proportion of HPV types detected on cancer cases.

BMT HPV 9G DNA Chip detects over 95% HPVs detected on cancer cases

Coverage (%) of HPV Types



HC: Hybridization Control
BG: Background

HPV Type: HPV Genotyping spot (HPV 19 types)
PCR: HPV Screening spot (HPV Other 19 types)

PC: PCR Internal Control

Genotyping (19types)	
High Risk	Low Risk
16, 18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66, 68	06, 11, 34, 40, 42
Detecting HPV 93.6%	
Screening (19types)	
High Risk	Low Risk
	03, 10, 26, 27, 32, 43, 44, 53, 54, 55, 57, 61, 62, 67, 69, 70, 71, 73, 74
Detecting HPV 1.7%	
Total Detection of HPV is 95.3% based on GSK report	

Slide 4: Merck and GSK report on the proportion of HPV types detected on cancer cases.

BMT HPV 9G DNA Chip detects over 95% HPVs detected on cancer cases

Detection Limits and Specification

HPV	Detection limit
16	10^1 copies
18, 31, 33, 35, 39, 45, 51, 52, 56, 58, 59, 66, 68	10^2 copies
53, 54, 69, 73	10^3 copies
06, 11, 34, 40, 42	10^2 copies
03, 10, 26, 27, 32, 43, 44, 55, 57, 61, 62, 67, 70, 71, 74	10^3 copies

 : HPV Hi-Risk Type
 : HPV Low-Risk Type

- Hybridization Temperature and Time

25°C /30min

- Washing Temperature and Time

Step I : 25°C /5min

Step II : 25°C /5min

- Results are automatically decided by BMT Digieye software and/or Scanner software.

Analysis time 1min

Scanners needed

- Nanostorage scanner, Perkin-Elmer scanner, Exon scanner, Capitalbio scanner And other scanners

can be standardized using BMT standard slides.

- Expiration date

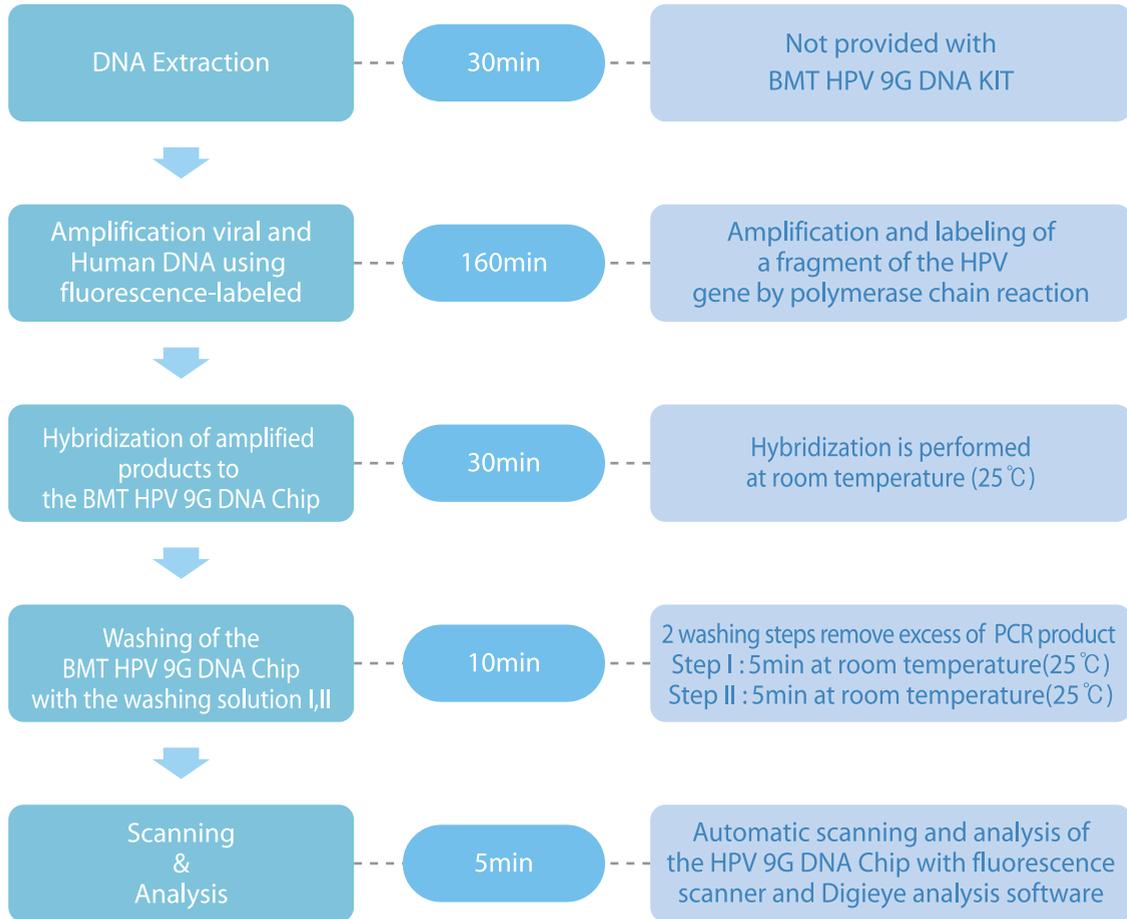
6 Month at room temperature

12 Month at refrigerator(4°C)

Slide 5 : Detection limit

1. The copies mean the number of DNA strands detectible. The limits for each types are denoted in the table above. Type 16 can be detected when only 10 virus are present
2. BMT HPV 9G DNA Chip can provide the final results in short hybridization time (30min) and subsequent washing (10min) at 25°C
3. The final results are analyzed automatically based on the BMT's Digieye software

Brief User Manual

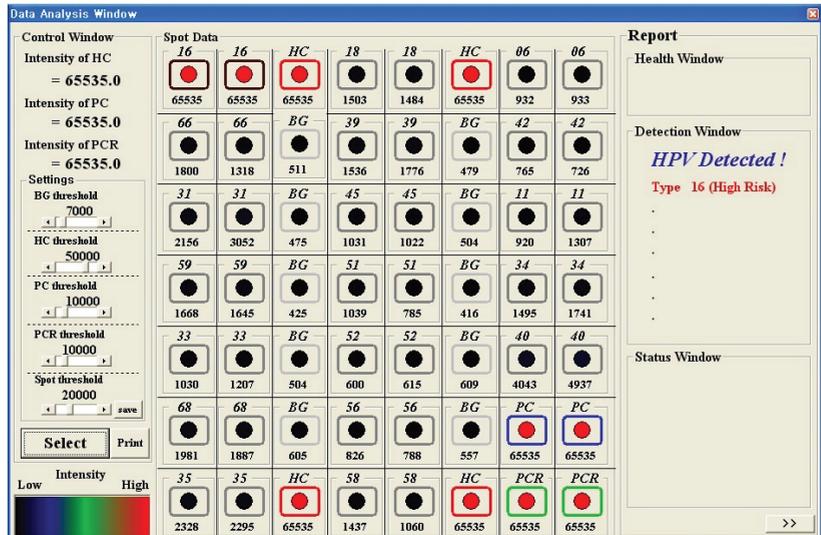


Slide 6: Brief User Manual

HPV final results can be obtained by the simple and easy methods above

Process steps	Components	Comment
PCR Amplification	DNA extraction kit	Not provided
	PCR kit	Provided
	PCR machine	Not provided
Genotyping	DNA chips	Provided
	Hybridization buffer Washing buffer	Provided
	Scanner (BMT standard slide will be provided)	Not provided Available scanner <i>Nanostorage scanner, Perkin-Elmer scanner, Exon scanner, Capitalbio scanner, And other scanners</i>
	"Digieye" (analysis software)	Provided

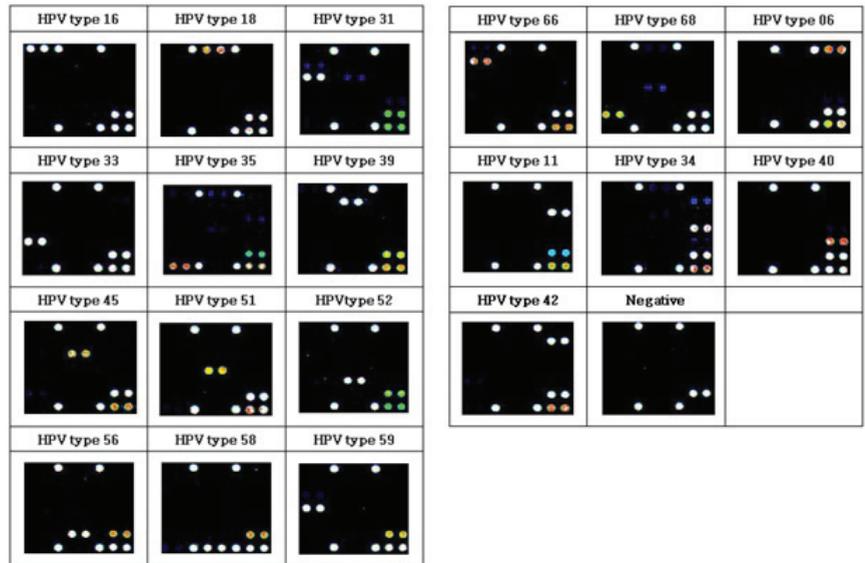
• Final Results by "Digieye"



■ Data Images by Scanner

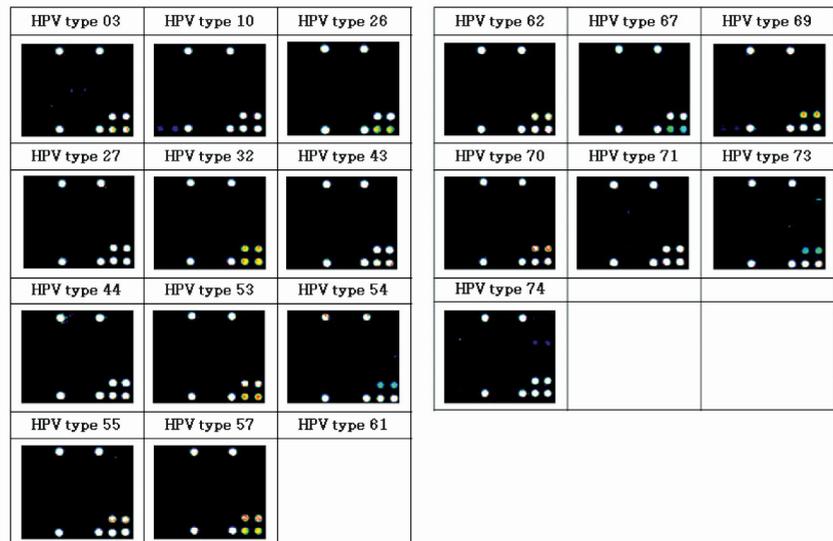
- Genotyping results

(14 High-Risk and
5 Low-Risk Types)



- Screening results

(19 Low-Risk Types)



Analysis Report form

HPV DNA chip analysis Report				
검표기 연립	0000.0000 형판	카드/검량키 수	00000000	000
주변자형	000	검주번호	080815WHD001	
주변번호	F / 60세	검정/보고일자	2008-08-15	2008-08-15
검사항목	HPV DNA chip	최위밀차기타		

Second Image	관측용 열																					
	<table border="0"> <tr> <td><input type="radio"/> HPV 16</td> <td><input type="radio"/> HPV 18</td> <td><input type="radio"/> HPV 05</td> </tr> <tr> <td><input type="radio"/> HPV 06</td> <td><input type="radio"/> HPV 39</td> <td><input type="radio"/> HPV 42</td> </tr> <tr> <td><input type="radio"/> HPV 31</td> <td><input type="radio"/> HPV 45</td> <td><input type="radio"/> HPV 11</td> </tr> <tr> <td><input type="radio"/> HPV 59</td> <td><input type="radio"/> HPV 51</td> <td><input type="radio"/> HPV 24</td> </tr> <tr> <td><input type="radio"/> HPV 33</td> <td><input type="radio"/> HPV 52</td> <td><input type="radio"/> HPV 40</td> </tr> <tr> <td><input type="radio"/> HPV 68</td> <td><input type="radio"/> HPV 56</td> <td><input type="radio"/> PC</td> </tr> <tr> <td><input type="radio"/> HPV 35</td> <td><input type="radio"/> HPV 58</td> <td><input type="radio"/> PCR</td> </tr> </table>	<input type="radio"/> HPV 16	<input type="radio"/> HPV 18	<input type="radio"/> HPV 05	<input type="radio"/> HPV 06	<input type="radio"/> HPV 39	<input type="radio"/> HPV 42	<input type="radio"/> HPV 31	<input type="radio"/> HPV 45	<input type="radio"/> HPV 11	<input type="radio"/> HPV 59	<input type="radio"/> HPV 51	<input type="radio"/> HPV 24	<input type="radio"/> HPV 33	<input type="radio"/> HPV 52	<input type="radio"/> HPV 40	<input type="radio"/> HPV 68	<input type="radio"/> HPV 56	<input type="radio"/> PC	<input type="radio"/> HPV 35	<input type="radio"/> HPV 58	<input type="radio"/> PCR
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<p>Data Analysis Window</p> <p>Central Window Intensity of IC = 65535.0</p> <p>Intensity of PC = 45777.4</p> <p>Intensity of PCR = 65535.0</p> <p>Settings IC Threshold 7000 IC Threshold 20000 PC Threshold 10000 PCR Threshold 20000 Spit Threshold 20000</p> <p>Select Print</p> <p>Low Intensity High</p>	<p>Report</p> <p>Health Window</p> <p>Detection Window HPV Detected! Type 16 (High Risk)</p> <p>Status Window</p>																																																																																																																
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본 장 모든 것이 우리 HP 바이러스 검사결과만 2-2로 (주)비메트릭스로부터 제공되며
Tel : 033-293-0047 FAX : 033-293-0019 http://www.biometrix.com

Slide 9 : Finla Reports for the Patients.

Each clinics and diagnostic labs should have their own reports forms to fill in the results shown above and short explanations. If you need our basic form please let us know