



## Product Application

### HPV DNA Purification from ThinPrep Vial

*Isolate human papillomavirus DNA from scraping cells on cervix of uterus collected in ThinPrep Vial using Maxwell 16 Instrument and Maxwell 16 Viral TNA Purification Kit.*

<b>Kit:</b>	Maxwell 16 Viral TNA Purification Kit (Cat. AS1150)
<b>Analyses:</b>	NanoDrop Spectrophotometer, MEBGEN™ HPV Kit (Medical & Biological Laboratories Co.,Ltd.) using Luminex.
<b>Sample Type(s):</b>	Scraping cells on cervix of uterus collected in ThinPrep Vial (Hologic, Inc)
<b>Input:</b>	300µL or 2mL
<b>Materials Required:</b>	

- Maxwell 16 Instrument (Cat. #AS2000)
- Maxwell 16 Viral TNA Purification Kit (Cat. #AS1150)
- Heat Block (56 degree C)
- High-speed centrifuge
- Vortex
- MEBGEN™ HPV Kit (MBL Co., Ltd.)

#### Protocol:

##### Preprocessing steps for 2ml sample

1. Transfer 2ml samples into a centrifuge tube.
2. Centrifuge at 14,000 xg for 3 minutes.
3. Remove 1.8ml of supernatant.
4. The residual 0.2ml was subjected to purification step.

##### Preprocessing steps for 300µL sample

1. Transfer 300µL samples into centrifuge tube.

##### Purification step for both 300µL or 2mL

1. Add 200µl of Lysis Buffer and 20µl Proteinase K Solution.
2. Mix thoroughly by vortex mixer.
3. Incubate 20 minutes at 56 degree C. During this time, prepare the Maxwell 16 Viral TNA Kit Cartridges.
4. Transfer the entire volume of lysate to well #1 of the cartridge.
5. Add 50µL Nuclease-Free Water into Elution Tube and put LEV Plungers onto well #8.
6. Load the Cartridge Rack onto the Maxwell 16 Instrument.
7. Begin the automated purification run.

This protocol was developed by a customer who works for one of CROs in Japan and is intended for research use only.

Users are responsible for determining suitability of the protocol for their application.

Further information can be found in Technical Bulletin #TB385, available at: [www.promega.com/protocols](http://www.promega.com/protocols)



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### Results:

Donor	Sample Volume			
	300µL		2mL	
	DNA Conc. (ng/uL)	A260/280	DNA Conc. (ng/uL)	A260/280
Donor A	45.0 *	1.286	330.0	1.737
Donor B	182.0 *	1.709	119.0	1.676
Donor C	11.0 *	2.200	79.5	1.691
Donor D	2.5	NA	116.0 *	1.731
Donor E	9.5	1.583	37.0 *	1.609
Donor F	0.5	NA	51.5 *	1.635
Donor G	0.0	NA	25.5 *	1.594
Donor H	0.5	NA	33.5 *	1.718
Donor I	107.5	1.720		
Donor J	10.5	1.615		
Donor K	57.5	1.716		
Donor L	46.0	1.673		

The samples which DNA conc. were over 10ng/µL (red color asterisks are attached) were analyzed by MEBGEN HPV Kit (MBL Co., Ltd.).

These samples were successfully analyzed by MEBGEN HPV Kit (MBL Co., Ltd.)

Maxwell 16 and Viral TNA Kit have passed both the between-run reproducibility test and the cross-contamination test in this institute.