

PCR Human Papillomavirus Detection Set (Cat.# 6602)

Application: Using the PCR Human Papillomavirus Detection Set for the Amplification and Detection of HPV16

The PCR Human Papillomavirus Detection Set (Cat. # 6602) is designed to detect human papillomavirus (HPV) types 16, 18, and 33, which are associated with cervical carcinoma. The set includes primers for the PCR amplification of the E6 coding region of HPV 16, 18, and 33 (140 bp for HPV 16, 18 and 141 bp for HPV 33) and HPV type-specific probes.

This experiment demonstrates the ability of these reagents to specifically detect HPV type 16 in cell culture and clinical samples using kit HPV16 primers in comparison to dot blot hybridization using a probe specific for HPV16. The product was used according to protocols described in its User Manual.

Results

Amplification products were only detected in samples infected with HPV 16. There was no amplification in samples infected with HPV18 or HPV 6/11 and HPV- samples. Similarly, dot blot hybridization with a ³²P-labeled HPV 16 probe was specific for HPV 16-infected samples.

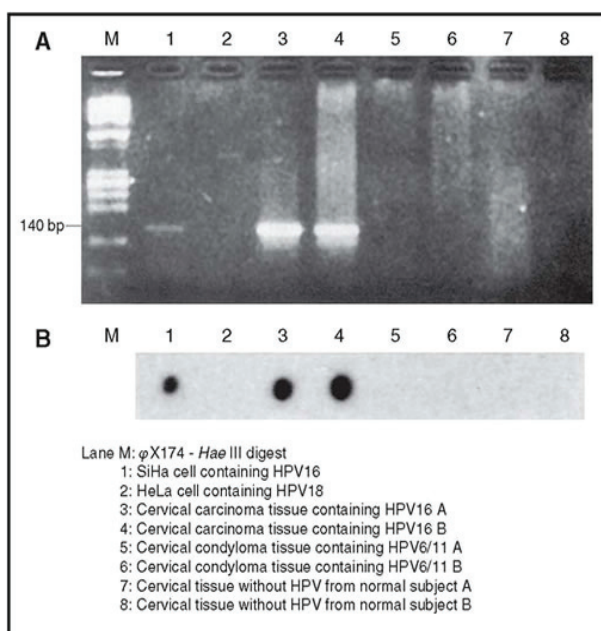


Figure 1. Amplification and detection of HPV16 DNA by gel analysis and dot hybridization. A. The amplified DNA products were resolved by gel electrophoresis. B. Dot blot hybridization of a 5' end-labeled (³²P) HPVb16 probe to the amplified DNA.

Conclusions

Using the PCR Human Papillomavirus Detection Set (Cat. # 6602), HPV type 16 could be specifically detected in cell culture and clinical samples.