

# DETERMINATION OF HIGH RISK PAPILLOMA VIRUS (HPV) GENOTYPES

# Amply-HPV Genotype HRG

Cat. n. 1.111/HRG

The infection by HPV (Human Papilloma Virus) is one of the main cause of cervical intra- epithelial neoplasia and of the ano-genital carcinoma. Among the different types of HPV that infect the genital and anal mucosa, the 16,18 31,33,35,39,45,52,56,59,66 have been detected mainly in invasive cervical carcinoma.

The Amply-HPV HRG genotype kit has been optimized in order to detect the viral DNA of HPV types above mentioned in biological samples as tissues and cells suspensions. The kit contains an Internal control ( $\beta$ -globine gene) which allows to check the preparation of the reactions and the presence of inhibitors. If the isolation phase is not right, the Internal control is not present.

**Principles of assay:** A) Extraction of genomic DNA B) amplification C) detection on agarose gel. **Applicability:** on extracted and purified DNA of omogenate tissue and cells preparations. **Tests:** 55.

## REAGENTS AND STORAGE

AMPLIFICATION	
Mix PCR HPV 16/35*	-20°C
Mix PCR HPV 18/59*	-20°C
Mix PCR HPV 52/66*	-20°C
2.5X PCR Buffer	-20° C
DNA Buffer	-20° C
Taq Polymerase (5U/µl)	-20° C
$H_2O$ sterile	-20° C
Internal control	-20° C
Control HPV 16	-20° C
Control HPV 18	-20° C
Control HPV 31	-20° C
Control HPV 33	-20° C
Control HPV 35	-20° C
Control HPV 39	-20° C
Control HPV 45	-20° C
Control HPV 52	-20° C
Control HPV 56	-20° C
Control HPV 58	-20° C
Control HPV 59	-20° C
Control HPV 66	-20° C

\* Mix PCR contains an internal PCR control that produces a fragment of 800 bp.

Stability: over 12 months if correctly stored.

#### **References:**

Journal of Clinical Microbiology 33, 690-695 (1995) Journal of Virology 69,3074-3083 (1995) Journal of Investigation Dermatology 105,367-371 (1995) Virology 184, 492-503 (1991)

### ANALYSIS OF RESULTS for ANALYSIS

Mix PCR HPV 16/35		Mix PCR HPV 18/59		Mix PCR HPV 52/66.		
Туре	Expected bp	Туре	Expected bp	Туре	Expected bp	
HPV 16	325bp	HPV 18	425 bp	HPV 52	360 bp	
HPV 31	520 bp 723 bp	HPV 39	340 bp 723 bp	HPV 56	325 bp 723 bp	
HPV 33	227 bp	HPV 45	475 bp	HPV 58	240 bp	
HPV 35	280 bp	HPV 59	395 bp	HPV 66	304 bp	

### ANALYSIS OF RESULTS for CONTROLS

Control	Controlled	Band	Band	Band	Band
	step	325bp	425bp	240bp	723bp
Neg Contr.	Isolation	No	No	No	No
DNA buffer	PCR	No	No	No	No
Internal control	PCR	No	No	No	Si
HPV 16	PCR	Si	No	No	No
HPV 18	PCR	No	Si	No	No
HPV 58	PCR	No	No	Si	No

Example:

