

# Experimental Report

<b>1. Experimental Title</b>	Cross contamination test
<b>2. Sample type</b>	Serum
<b>3. Target nucleic acid</b>	Viral DNA
<b>4. Starting volume</b>	200ul
<b>5. Elution volume</b>	50ul
<b>6. Extraction kit</b>	ExiPrep™ Viral DNA/RNA Kit (Cat. No. K-3535)
<b>7. Extraction method</b>	ExiPrep™ 16 (Cat. No. A-5010)
<b>8. Extraction protocol</b>	Viral DNA from Serum

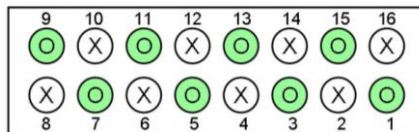
## 9. Materials & Methods

### i) Material

Human normal serum containing HBV control DNA

### ii) Method

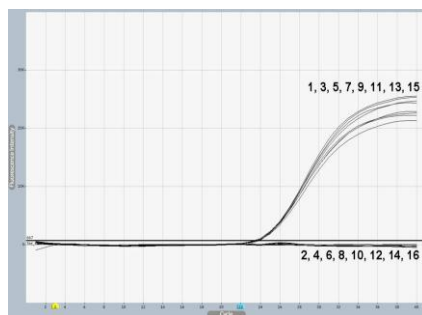
DNA was purified from 200ul of the serum using ExiPrep™ Viral DNA/RNA Kit (Cat. No. K-3515) and ExiPrep™ 16. Load 200 ul of the serum containing HBV control DNA and same amount of DNase, RNase free water into sample loading well as described below, to confirm the cross contamination during DNA extraction. Extracted viral DNAs were analyzed with real time PCR machine. (Exicycler™ 96, Cat. No. A-2060)



O : sample (serum+control DNA), X : DNase, RNase free water

## 10. Experimental Results

### i) Real time PCR result



Sample No.	Flu. Dye	Quencher	Ct	Ct Threshold
1	FAM	BHQ	23.32	667
2	FAM	BHQ	Undetermined	667
3	FAM	BHQ	23.87	667
4	FAM	BHQ	Undetermined	667
5	FAM	BHQ	23.60	667
6	FAM	BHQ	Undetermined	667
7	FAM	BHQ	23.28	667
8	FAM	BHQ	Undetermined	667
9	FAM	BHQ	23.51	667
10	FAM	BHQ	Undetermined	667
11	FAM	BHQ	23.44	667
12	FAM	BHQ	Undetermined	667
13	FAM	BHQ	23.70	667
14	FAM	BHQ	Undetermined	667
15	FAM	BHQ	23.60	667
16	FAM	BHQ	Undetermined	667

Each sample well (containing serum + control DNA) demonstrated the results of qualitative PCR analysis of the extracted DNA with Exicycler™ 96, but the non-sample wells (containing water) did not contain any contaminating DNA. Also, each sample well has similar Ct value.

## 11. Discussions

The results confirmed that none of 8 non-sample wells were positive. The same results were consistently obtained.