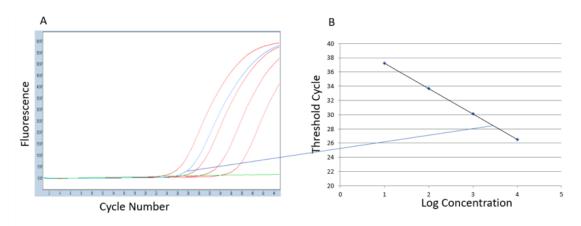


## Quantitative evaluation with *ampli*Cube HEV 2.0 Quant: Calculation of viral load

## Standard curve

The standard curve is formed by measuring the three standards and the positive control (standard 2) and recording them with their correspondingly defined concentrations in the device-specific software of the real-time cycler. With the help of the standard curve, the concentrations of positive patient samples can be calculated in  $IU/\mu I$  extract.

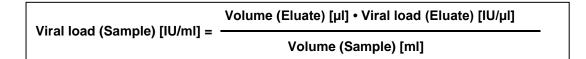


**A** Amplification curve of standards with concentrations of  $10^1$ ,  $10^2$ ,  $10^3$  and  $10^4 IU/\mu l$  (red), a positive HEV sample (blue) and a negative HEV sample (green) **B** Respective conversion into the standard curve and sample analysis

## Calculation of the pathogen concentration in the sample material (IU/mI)

For the final calculation of the pathogen concentration in the sample material (IU/ml sample), the volume of the tested purified material and the factor for the concentration (dependent of the elution volume) must be taken into account.

The viral load is calculated using the following formula:



## Example:

Volume (Sample)<sup>\*</sup> = 400  $\mu$ l sample volume, used for extraction Volume (Eluate)<sup>\*</sup> = 50  $\mu$ l elution volume from extraction Viral load (Eluate)<sup>\*\*</sup> = 1000 IU/ $\mu$ l, calculated via standard curve

50 µl • 1000 IU/µl

Viral load (Sample) [IU/ml] = ----- = 125 000 IU/ml

0.400 ml

\* values in accordance with the recommendations for the extraction (see IFU) \*\* example

MIKROGEN GmbH Floriansbogen 2-4 82061 Neuried Germany Telefon +49 89 54801-0 Telefax +49 89 54801-100 info@mikrogen.de www.mikrogen.de Bankverbindung IBAN: DE18 7015 0000 0108 1272 00 BIC/SWIFT: SSKMDEMM Stadtsparkasse München

Account for payments in US Dollar: IBAN: DE40 7015 0000 0801 1147 86 BIC/SWIFT: SSKMDEMM Bank: Stadtsparkasse München Geschäftsführer: Dr. Erwin Soutschek Sitz der Gesellschaft: Neuried (München) Reg.-Gericht: München HRB Nr. 87312 USt.-Nr. Mikrogen GmbH: DE129416542

