



## Effect of Flux Decay on Virus Retention



Application  
Report  
Virus  
Clearance

#05

#01

#02

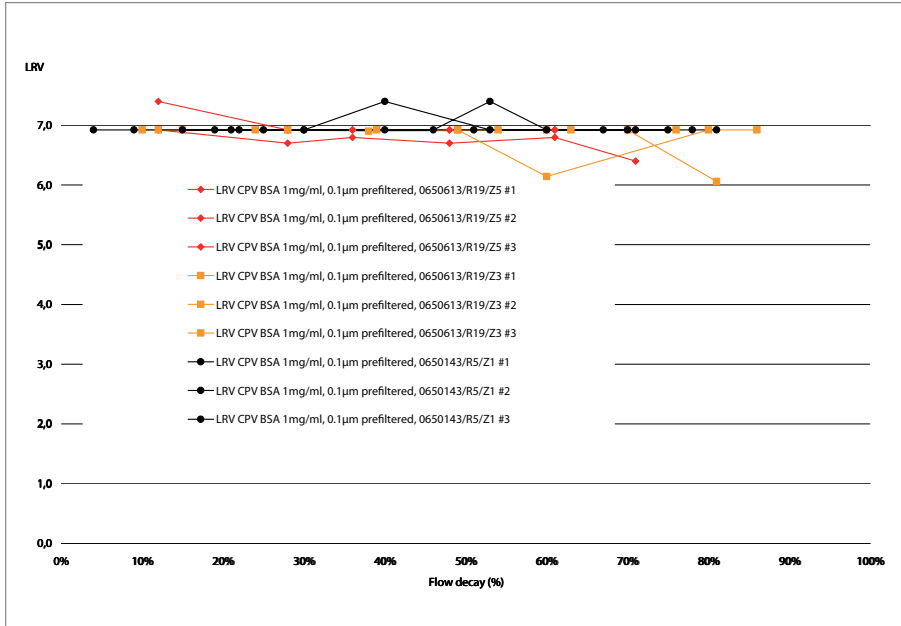
#03

#04



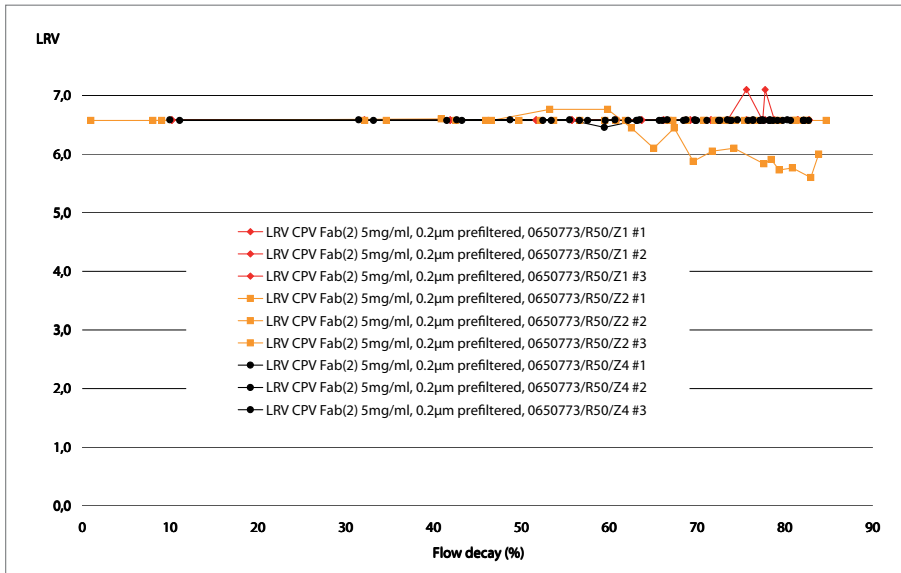
**Graph 3: LRV versus Flow decay – BSA**

BSA 0.1%, 20 mM potassium phosphate buffer, Virosart® CPV Minisart  
 Lot number 0650613/R19/Z5, 0650613/R19/Z3, 2 bar, Upstream titer  $6.4 \times 10^7$ /ml



**Graph 4: LRV versus Flow decay – Fab<sub>2</sub>**

5 mg/ml in 25 mM Tris, pH 6.5, 2 bar, Virosart® CPV Minisart Lot number 0650773/R50Z1,2,4  
 Upstream titer  $3.0 \times 10^7$ /ml



**Summary**

The 20 nm Virosart® CPV membrane filter provides reliable virus retention of small viruses.

The capability of Virosart® CPV to retain more than 4 log of small non enveloped viruses is not necessarily correlated to the flux decay.

Reliable retention of more than 4 log has been shown for flux decay profiles of up to 90%.

The data shown are typical examples for different protein types, buffers and concentrations. They can not, however, be used to predict the performance in general.

It is up to the end user to determine what level of flow decay and virus retention is acceptable for his process in order to achieve the desired virus retention.

<sup>1</sup>: "Normal Flow Virus Filtration – Detection and Assessment of Endpoint in Bioprocessing", Mark Bailey, E. Lilly, May 2005 PDA Viral Safety Conference

<sup>2</sup>: "The Sartorius virus and contaminant removal platform", K. Tarrach, Sartorius Downstream Technology Forum Barcelona, November 23rd 2004

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