Baculovirus Titer Assay

Quick and reproducible determination of infectious virus particles in high titer baculovirus stocks

Proteos utilizes a plate-based flow cytometry assay to determine the titer (infectious particles per milliliter, IU/mL) of baculovirus stocks.

Understanding the multiplicity of infection (MOI) is an important step in the production of recombinant proteins using baculovirus mediated expression platforms. The MOI is a measure of the number of infectious virus particles used for infection relative to the number of insect cells in the culture.

Advantages:

- Accurate determination of baculovirus titers in the range of 107-109 IU/mL
- Requires as little as 1 mL of baculovirus stock for assay to be performed in triplicate
- Results in as few as 3-5 business days from sample receipt

Method:

Serial dilution of baculovirus stock Infect insect cells and incubate for 8 hours Bind FITC-labeled anti-gp64 antibody to infected cells Measure number of infected cells for each dilution via flow-cytometry Calculate titer of sample

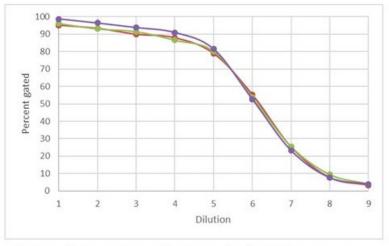


Figure 1. Curves representing percent gated values versus dilution number for three replicates.

Tite	er Determinati	on (IU/mL)	
Replicates	Average	Std Dev	%CV
2.08E+09	2.03E+09	6.3E+07	3.12
2.05E+09			
1.96E+09			

Figure 2. Representative data provided to customer for titer determination.



proteos.com