## **Baculovirus Titer Assay**

## Rapid, reproducible determination of infectious virus particles in high titer baculovirus stocks

We utilize 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. MOI measures 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, 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

	80	+		M			
ted	70						
nt ga	50				-		
Percent gated	40	-				-	
۵.	30	-					
	20						
	10					L	
	0					8	

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

Titer Determination (IU/mL)									
Average	Std Dev	%CV							
		3.12							
2.03E+09	6.3E+07								
	Average	Average Std Dev							

Figure 2. Representative data provided to customer for titer determination

Email <u>info@proteos.com</u> to connect with our scientists.

