

Baculovirus Titering Kit

Expression Systems' Baculovirus Titering Kit facilitates accurate determination of infectious baculovirus titers in less than 24 hours. The assay is based on detection of the baculovirus gp64 fusion protein which is expressed on the surface of infected insect cells within six hours of infection. Staining of cells with a fluorescently labeled anti-gp64 antibody allows for identification of infected insect cells. By inoculating cultures with a series of log dilutions of virus, and staining the cultures 18–20 hours post inoculation, the ratio of infected to uninfected insect cells can be determined by flow cytometry. Statistical analysis of the percentage of infected cells in the virus dilution series enables accurate infectious titer determination. Alternative assays that also claim results in under 24 hours (such as particle counting instruments and qPCR) are indeed fast but do not deliver true infectious titer values. In contrast to the plaque assay, the culturing conditions employed for the flow cytometric assay closely reflect actual culturing conditions utilized for expression cultures, resulting in a more relevant titer value in a fraction of the time. Provided access to a flow cytometer equipped to handle 96 well plates, the flow cytometric assay is easily adapted to high throughput processes.

- Reproducible and accurate titer results within 24 hours
- Measures infectious virus
- Suspension culture methodology simulates actual production conditions
- Works with any flow cytometer capable of reading samples from 96-well plates
- Flow cytometric data collection removes the operator error of counting plaques
- gp64-PE antibody can be used alone to monitor infection kinetics of baculovirus in insect cell culture



Insect and Mammalian
Cell Culture Media, Systems
and Services

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Order today—and find helpful documentation
at expressionsystems.com

Baculovirus

Titering Kit

Contents

gp64-PE Antibody

Clone	AcV1
Antibody Composition	Mouse IgG2A
Storage Buffer	Phosphate buffered saline (PBS) containing 0.05% BSA and 0.09% sodium azide.

Recombinant Baculovirus Control

BestBac 2.0 co-transfected with empty pVL1393 produced in Sf9 cells

Media Type	ESF 921 or ESF AF
Platform compatibility	Works with infectious baculovirus produced by most methods
Shipping Condition	Baculovirus Titering Kit ships on cold packs
Storage Condition	2–8°C, protect from light
Use By Date	Six months from Date of Manufacture for Baculovirus Control

Additional Products

Expression Systems offers a variety of media formulations for insect and mammalian cell culture. Expression Systems provides tools to support the baculovirus and host cell expression system including baculovirus vectors and kits to determine baculovirus production.

	Cell Culture Media and Reagents		Molecular Tools
96-001	ESF 921™ Insect Cell Culture Medium, Protein Free	95-055	Transfection Reagent
99-300	ESF AF™ Insect Cell Culture Medium, Animal Free	91-001	BestBac™ 1.0 Linearized Baculovirus DNA
96-200	ESF 921™ Delta Series Insect Cell Culture Medium, Methionine Deficient	91-002	BestBac™ 2.0 Δ v-cath/chiA Linearized Baculovirus DNA
96-299	ESF 921™ Delta Series Insect Cell Culture Medium, Custom Amino Acid Deficient	91-100	BestBac™ 1.0 Baculovirus Cotransfection Kit
95-020	Transfection Medium	91-200	BestBac™ 2.0 Δ v-cath/chiA Baculovirus Cotransfection Kit
95-006	Production Boost Additive	97-101	Baculovirus Titering Kit
98-001	ESF SFM Serum Free Cell Culture Medium For Hybridoma, CHO & 293 Cells	97-201	gp64-PE Antibody

About Expression Systems

Headquartered in Davis, California, Expression Systems specializes in the products, services and support necessary for high quality baculovirus protein production. Our unique focus in BEVS applications helps researchers and clinicians around the world work at the highest level of consistency. At any step in the process, from gene synthesis to protein purification, Expression Systems helps achieve best-in-class results.

