

SARTORIUS



Virotag[®] INVA & Virotag[®] INVB Reagents

Real-Time Quantification
of Influenza A and B Strains
with the Virus Counter[®]
Platform

**The Virus Counter[®] 3100 Platform and
Antibody-Based Virotag[®] AB reagents Provide
Unique Insights:**

- Real-time quantification – Process monitoring and production optimization
- Rapid, biologically-relevant readout – Total viral particles
- High-specificity quantification – Fluorescently labeled antibodies
- Robust detection – Early process crude samples
- Reduced standard errors – Versus TCID₅₀

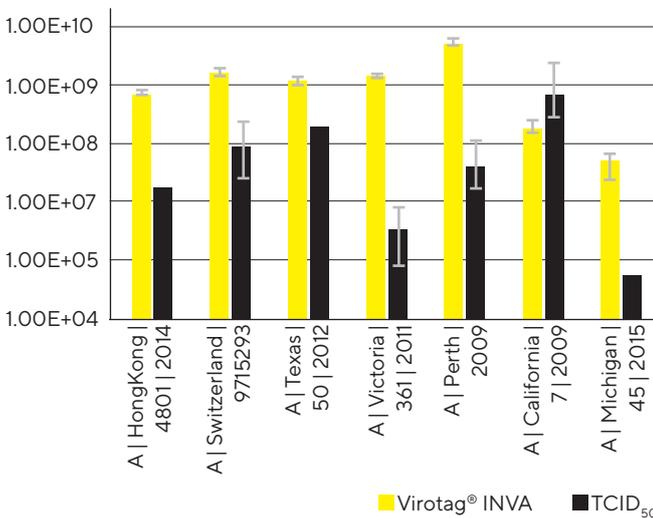
Influenza Virus Quantification

Quantification of influenza virus particles can be very challenging. Measurement of virus counts by infectivity often relies upon highly variable methods such as TCID₅₀. Indirect methods such as qRT-PCR often give artificially high counts. Current methods are time-consuming and require days to weeks to deliver a result, potentially delaying manufacturing processes and the delivery of new vaccines to the public. Rapid and precise analytical methods are needed to monitor virus production and enumerate total particles used in final formulations. The production of influenza vaccines against seasonal and pandemic influenza strains is a time-critical process. Setbacks in vaccine production can delay the availability of these life-saving products to the public and is a key concern. Accurate monitoring of virus production and purification processes can help ensure the vaccine is available on-time.

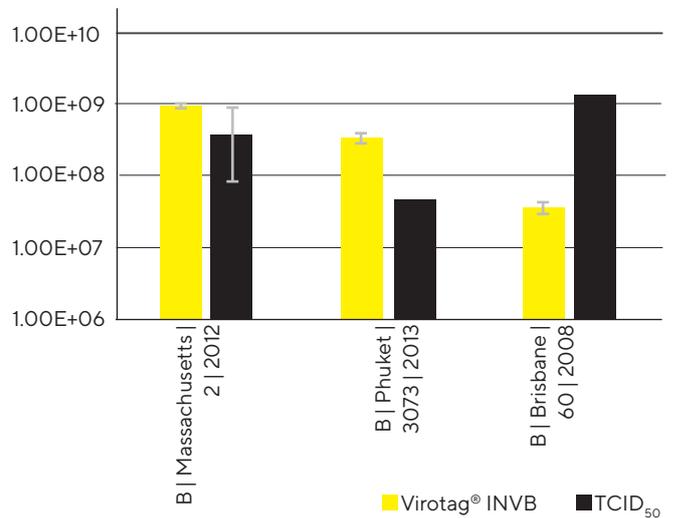
Total Particle Quantification Compared to Infectious Units

Total particle quantification is quick and precise as shown by the reduced standard deviation compared to TCID₅₀ values. Total particle to infectious particle ratios vary significantly among influenza samples.

Comparison of Influenza A strain quantification with Virotag® INVA reagent to TCID₅₀ titers



Comparison of Influenza B strain quantification with Virotag® INVB reagent to TCID₅₀ titers



Error bars represent standard deviation, standard deviation not available for all samples



The Virus Counter® Platform offers three quantification solutions for influenza virus that address unique quantification needs. Choose the ideal product for your sample

The Virus Counter[®] 3100 Platform

- Direct, precise, accurate – Quantification of total virus particles
- Universal – Nucleic acid and protein based detection (Virotag[®] DY ENV reagent)
- Biologically specific detection – Antibody-based detection (Virotag[®] AB reagents (INVA and INVB) reagent)
- Ease of use – Patented no-wash assay
- Simplified workflow – 30 minute incubation, 3 minute analysis per sample

Order Information

Reagents	Order Number
Virotag [®] INVA	VIR-91151
Virotag [®] INVB	VIR-91152
Virotag [®] DY ENV	VIR-92416

	Epitope Recognition	2 Channel Recognition	Influenza A Strains	Influenza B Strains	Egg-Grown Virus	Cell-Culture Grown Virus
Virotag [®] INVA	■		■		■	■
Virotag [®] INVB	■			■	■	■
Virotag [®] DY ENV		■	■	■		■

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