



TECH DATA SHEET

TiterSafe Hemagglutinating Particles

DESCRIPTION

Product	TiterSafe Hemagglutinating Particles, Influenza A
Catalog Number	HAP-1230
Lot	IAH-1176A
Subtype	H1N1
Strain	Missouri/11/2025
Size	200µL/vial
Packaging	DMEM
Dilution Ratio at 1 HA Unit	1:256
Dilution Ratio at 4 HA Units	1:64
HAI Victoria serum dilution	1:1024 (lowest serum dilution to achieve inhibition)
Expiration Date	July 2029

SAFETY & HANDLING

Shipping	Shipped on dry ice
Stability and Storage	Store at $\leq -80^{\circ}\text{C}$ upon receipt.

TiterSafe particles are optimized for use in HA and HAI assays. TiterSafe particles display antigenically correct HA/NA protein pseudotyped on replication-incompetent virus particles that contain a heterologous lentiviral (HIV) core. TiterSafe particles are capable of a single round of infection. TiterSafe particles are produced in HEK-293T cells using three separate plasmids, encoding the HA protein, the NA protein, and a lentiviral gag polyprotein.

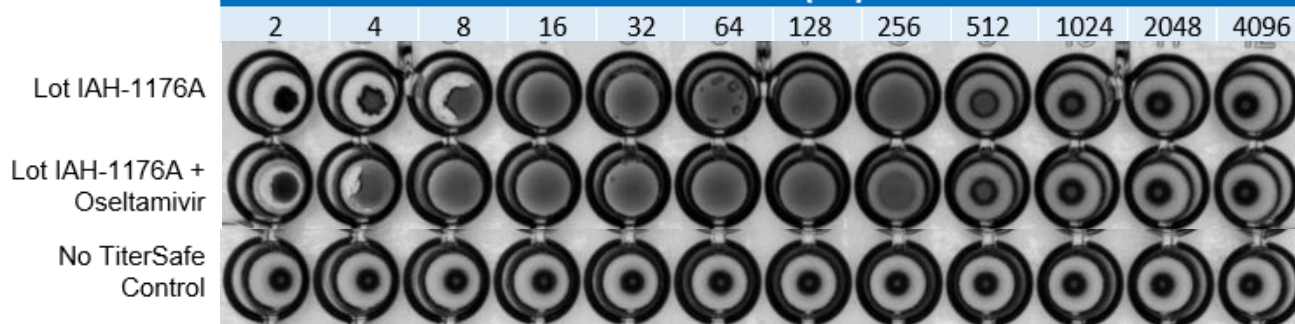
TiterSafe particles are derived from biological materials, so they should be handled with caution within a laboratory environment. TiterSafe particles are not to be used in humans or in animals raised for food.

Thaw tubes in a 37°C water bath for 1 minute and place on ice until ready to use. TiterSafe particles will appear as a translucent solution. Gently mix prior to use and pulse tube for 3 seconds at high speed in a tabletop microfuge to recover all volume from the tube. Avoid vortexing TiterSafe particles. Re-freezing of TiterSafe particles is not recommended.

HA AND HAI DATA

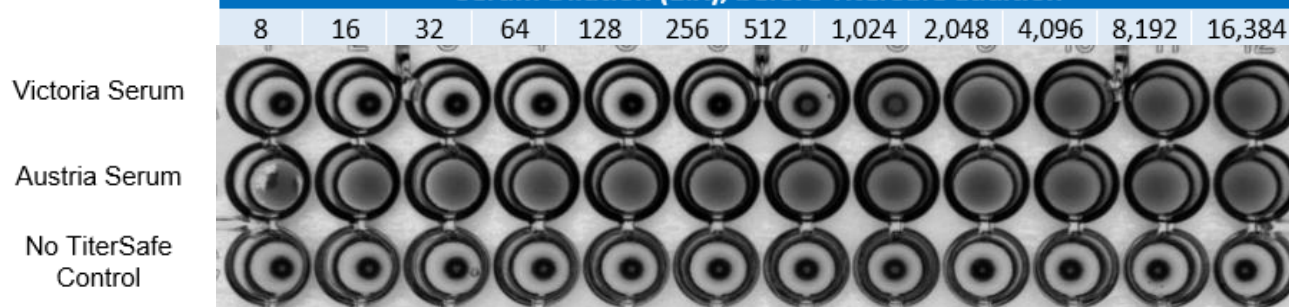
Lot IAH-1176A HA assay

Virus Titer (1:X)



Lot IAH-1176A HAI assay

Serum Dilution (1:X), before TiterSafe addition



HA and HAI assays were performed using 1% Guinea Pig RBCs in a 96-well plate. TiterSafe was treated with and without 1mg/mL Oseltamivir to counteract NA activity, which may interfere with the TiterSafe-RBC lattice at high TiterSafe concentrations.

The HA assay was used to determine an Influenza A TiterSafe titer at 4 HA units. The titer at 4 HA units and hyperimmune serum were used to perform the HAI assay. Reported serum dilutions are defined prior to TiterSafe volume addition.