TECH DATA SHEET

TiterSafe Hemagglutinating Particles

DESCRIPTION

Product	TiterSafe Hemagglutinating Particles, Influenza A
Catalog Number	HAP-1212
Lot	IAH-588A
Subtype	H3N2
Strain	Darwin/6/2021
Size	200µL/vial
Packaging	DMEM
Dilution Ratio at 1 HA Unit	1:512
Dilution Ratio at 4 HA Units	1:128
HAI Darwin serum dilution	1:1024 (lowest serum dilution to achieve complete inhibition)
Expiration Date	December 2026

SAFETY & HANDLING

Shipping	Shipped on dry ice
Stability and Storage	Store at ≤ -80°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.

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Version 2, 08/21/2026

HA AND HAI DATA

Lot IAH-588A HA assay

	Virus Titer (1:X)										
	2	4	8	16	32	64	128	256	512	1024	2048	4096
Lot IAH-588A												
No TiterSafe Control												

Lot IAH-588A HAI assay

	Serum Dilution (1:X), before TiterSafe addition											
	8	16	32	64	128	256	512	1,024	2,048	4,096	8,192	16,384
A/Victoria Serum												
B/Phuket Serum												
B/Austria Serum												
A/Darwin Serum												
No TiterSafe Control												

HA and HAI assays were performed using 1% Guinea Pig RBCs in a 96-well plate.

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.