Evaluation of cylindrical micelles assembled from amphiphilic β-peptides as antigen delivery nanostructures

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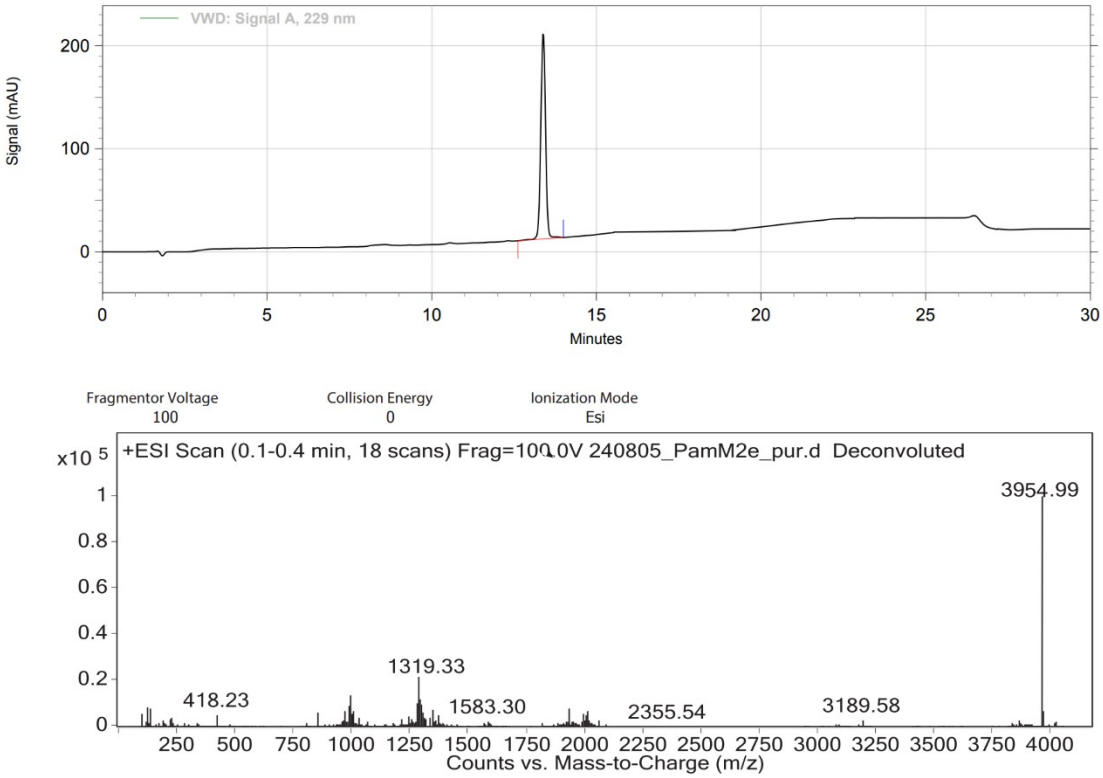

Figure S1 HPLC chromatogram and MS-TOF spectra of PA-M2e. HPLC analysis was performed using a C18 column with a linear gradient of 20% to 60% acetonitrile in H_2O/TFA (0.06%) over 20 minutes, while absorbance was monitored at 229 nm. Mass spectrometry analysis was conducted using an ESI-TOF mass spectrometer.

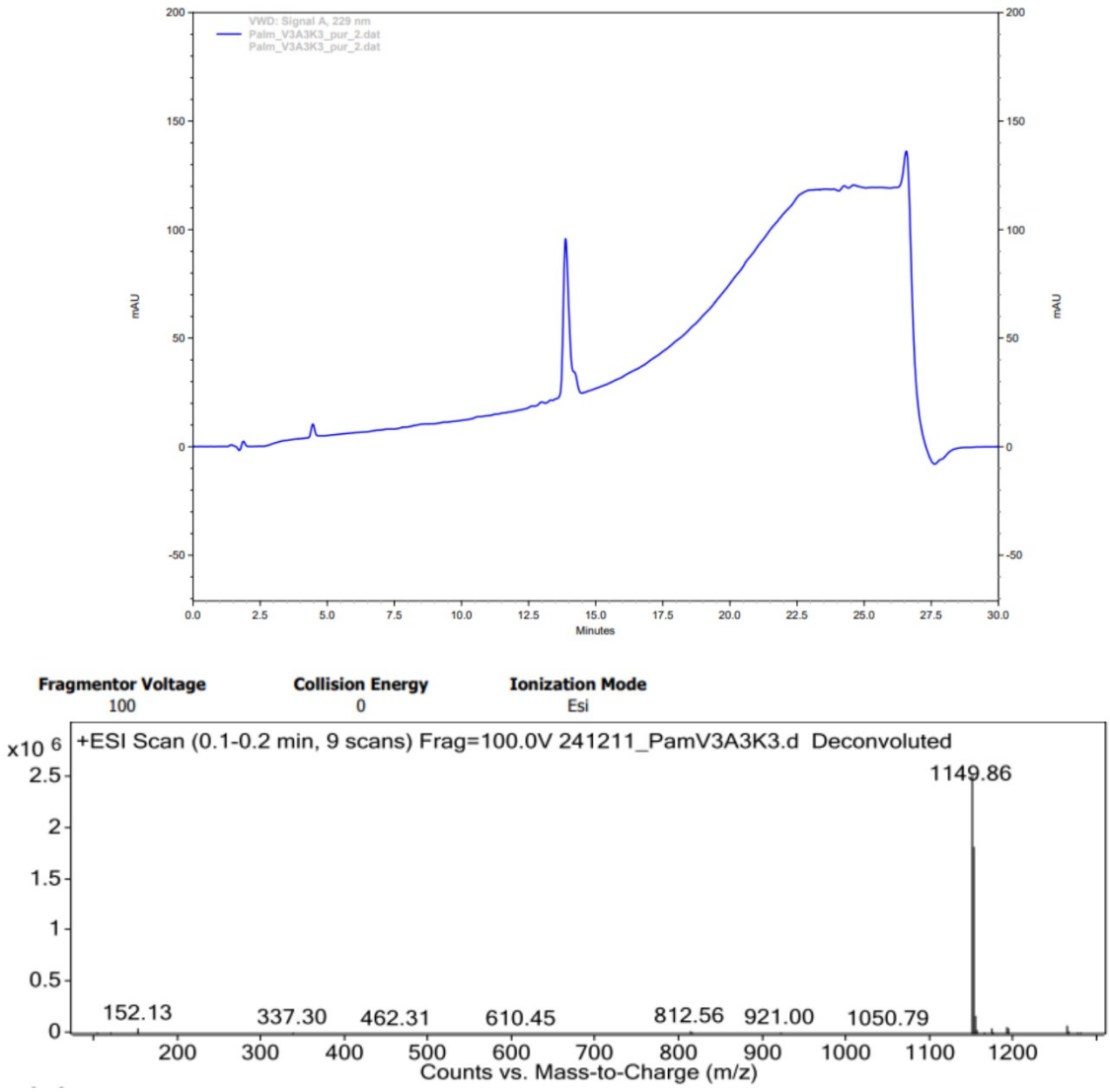

Figure S2 HPLC chromatogram and MS-TOF spectra of PA. HPLC analysis was performed using a C18 column with a linear gradient of 20% to 60% acetonitrile in H_2O/TFA (0.06%) over 20 minutes, while absorbance was monitored at 229 nm. Mass spectrometry analysis was conducted using an ESI-TOF mass spectrometer.

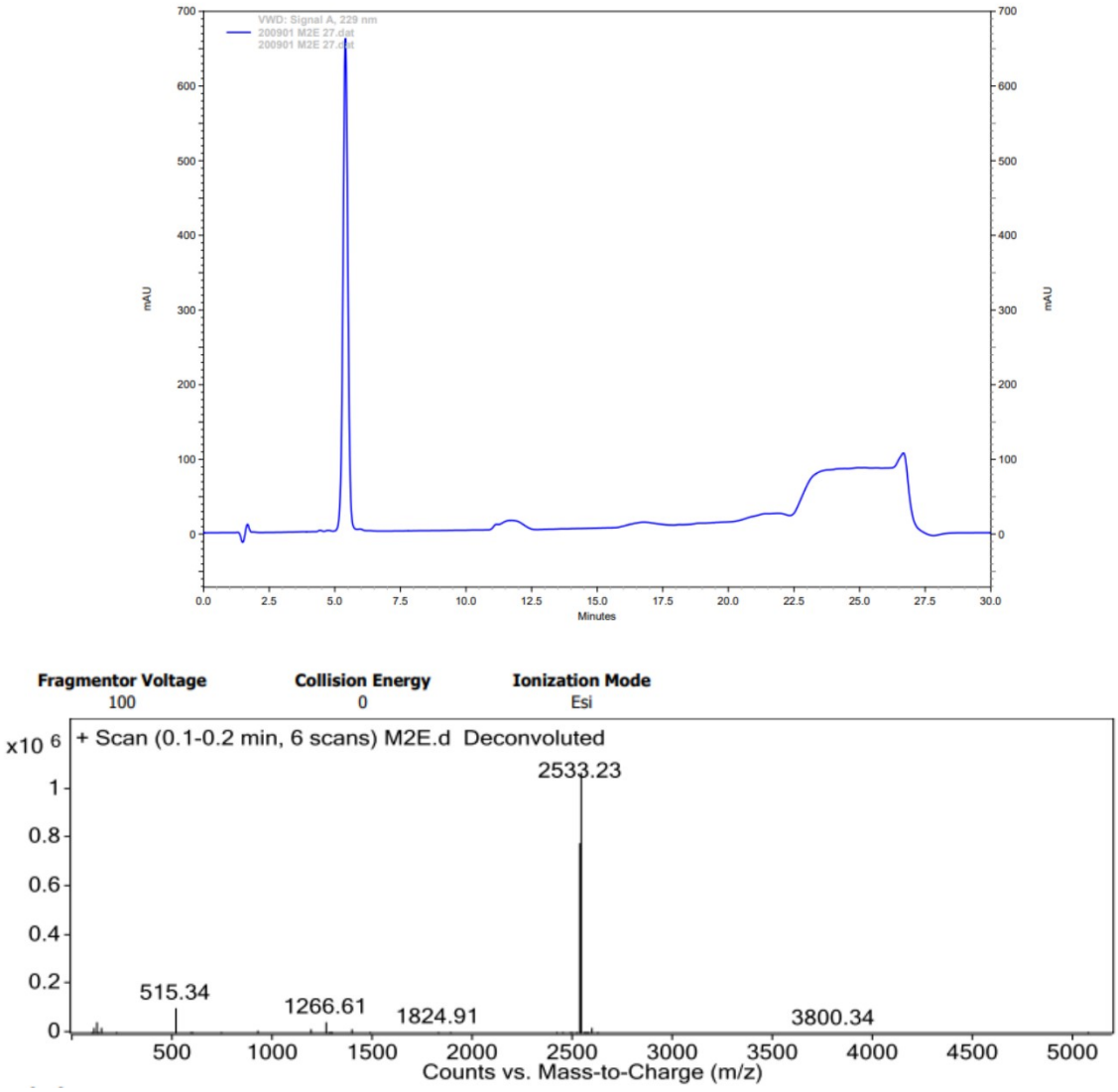

Figure S3 HPLC chromatogram and MS-TOF spectra of M2e. HPLC analysis was performed using a C18 column with a linear gradient of 20% to 60% acetonitrile in H2O/TFA (0.06%) over 20 minutes, while absorbance was monitored at 229 nm. Mass spectrometric analysis was conducted using an ESI-TOF mass spectrometer.

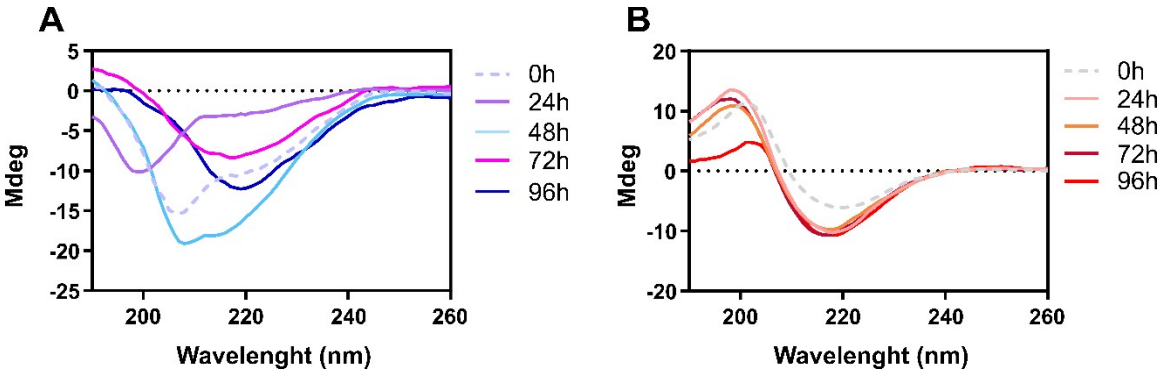

Figure S4 CD spectra of PA-M2e (A) and PA (B) over incubation time.

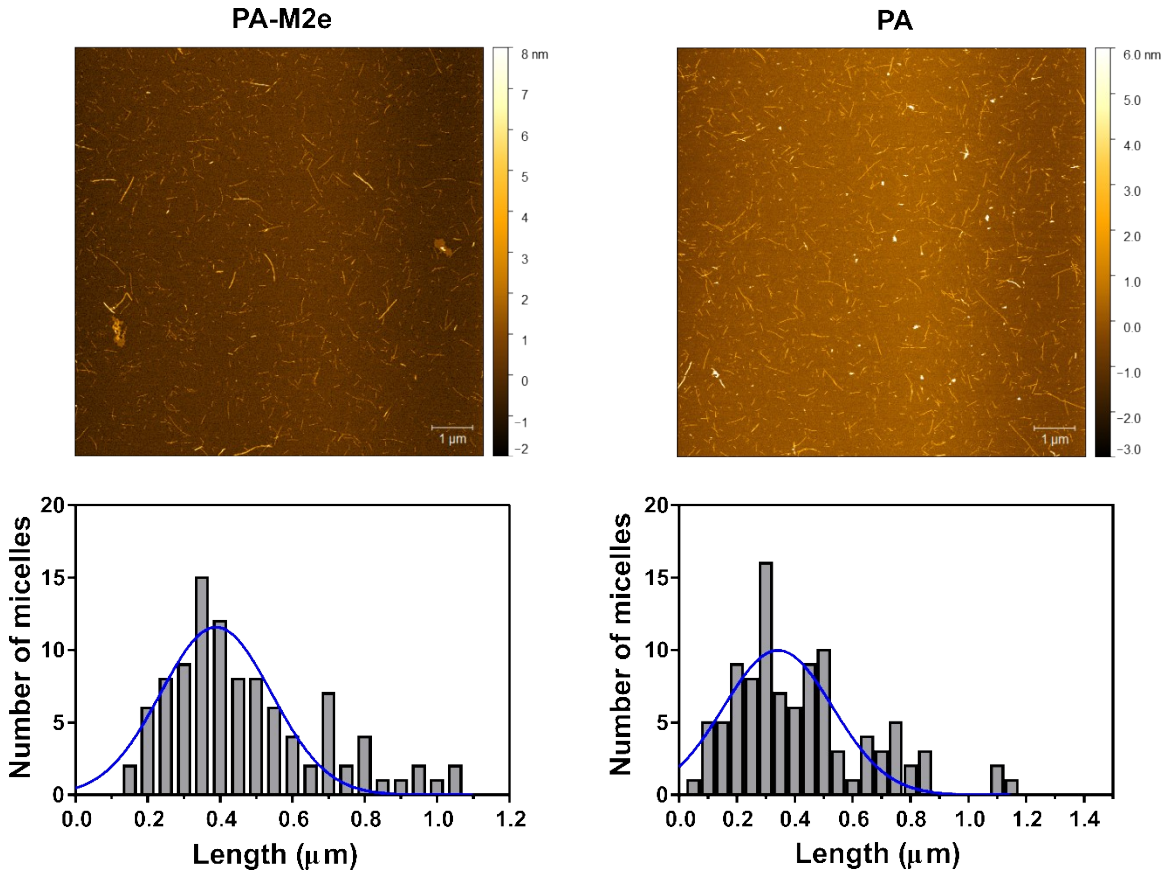

Figure S5 Representative of atomic force microscopy and size distribution of PA-M2e and PA. Assemblies were obtained after 96h incubation under constant agitation at RT. Scale bar is 1 µm.

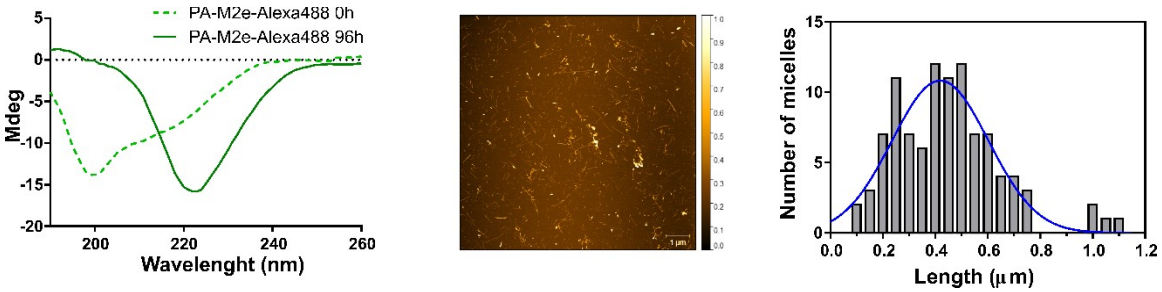

Figure S6 CD spectra, representative of atomic force microscopy and size distribution of PA-M2e-alexa488. Assemblies were obtained after 96h incubation under constant agitation at RT. For the AFM image, scale bar is 1 µm.

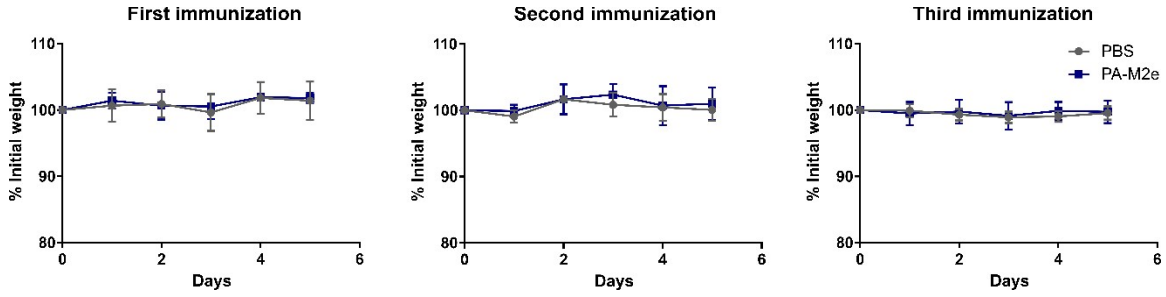

Figure S7 Weight loss of mice after each immunization with PA-M2e and the vehicle control PBS.

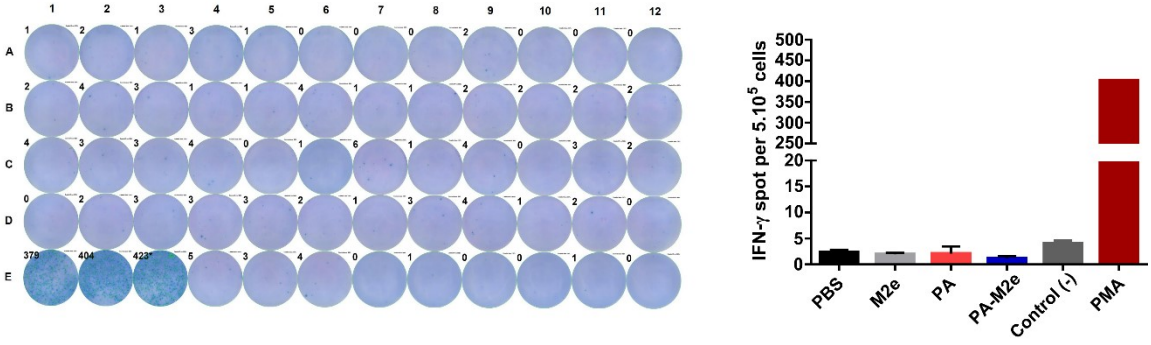

Figure S8 Elispot IFN-γ. ELISpot analysis of IFN γ from ex vivo splenocytes stimulated for 36 h with 2 µg of M2e peptide.

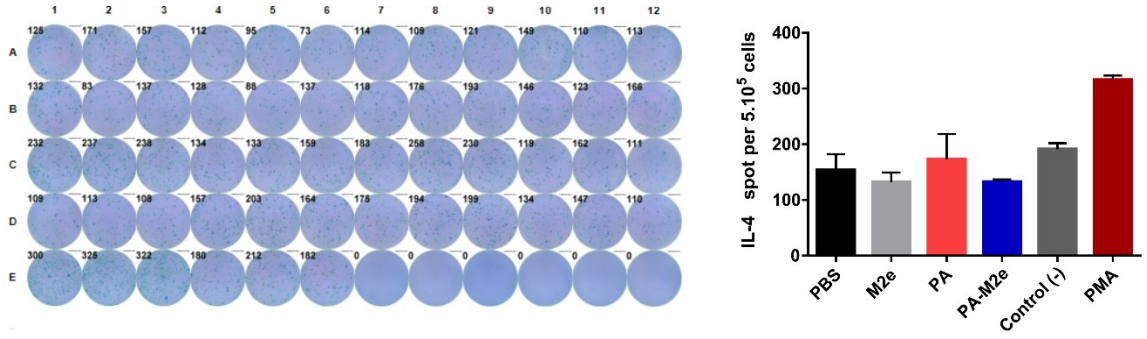

Figure S9 Elispot IL-4. ELISpot analysis of IL-4 from ex vivo splenocytes stimulated for 36 h with 2 µg of M2e peptide.

Table S1. Scale for clinical symptoms of influenza infection

Intensity	Temperature (°C)	Fur	Posture	Eyes	Ears	Response to stimuli	Activity	Feces	Dehydration (Pinch on skin)
0 (absent)	> 36	Smooth and even	Normal	Open	Normal	Normal	Normal	Normal	Normal
1 (light)	35-36	Fur loss	Slightly hunched back	Half-closed	Bent	Calm, curious	Reduced	Soft	Skin rapidly recovers
2 (moderate)	32-35					Delay in response	Immobile, reactive	Sticky	Skin slowly recovers
3 (severe)	< 32	Ruffled fur	Hunched back	Closed	Laid down	Inactive	Lethargic	Liquid	No recovery