

Supporting Information for

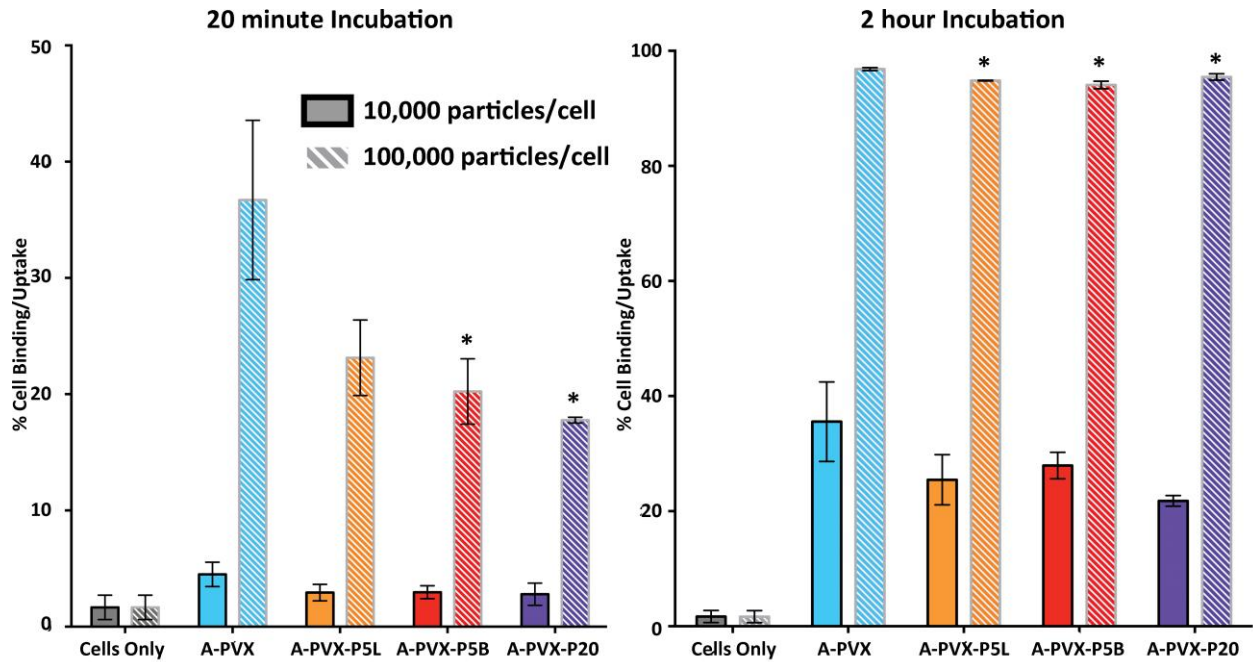
Stealth filaments: polymer chain length and conformation affect the *in vivo* fate of PEGylated potato virus X

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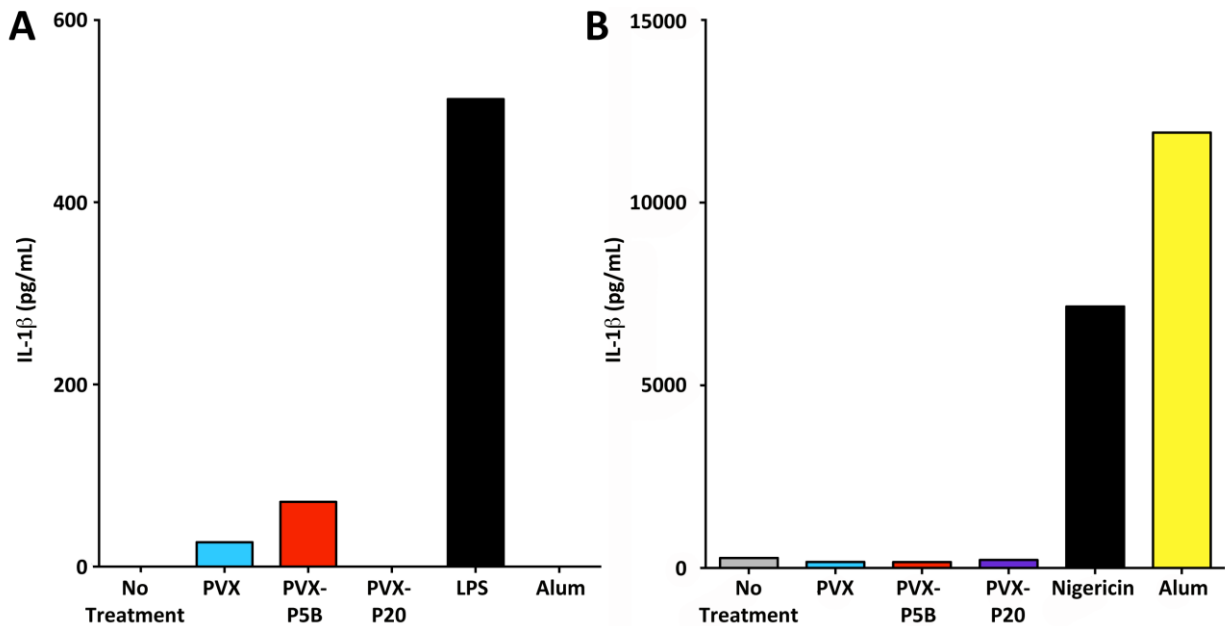
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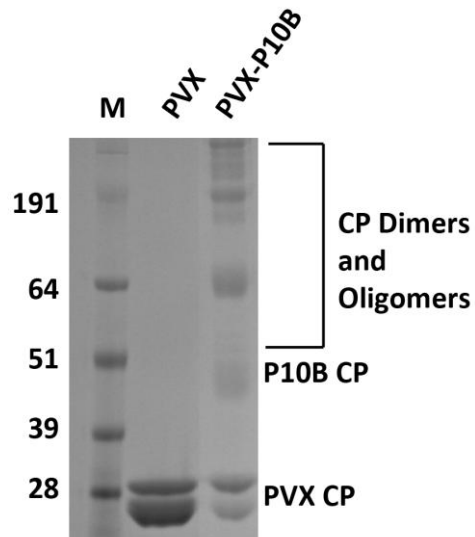
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Supporting Figure S1. Time and concentration-dependent A-PVX-PEG-cell interactions using RAW264.7 cells and flow cytometry. * $p < 0.05$ compared to A-PVX.



Supporting Figure S2. Inflammasome activation as measured by IL-1 β production for A) untreated and B) LPS-primed BMDC cells after exposure to PVX-PEG formulations.



Supporting Figure S3. Characterization of PVX-P10B particles. SDS-PAGE analysis to determine number of PEG chains attached. PVX-P10B was synthesized with 609 PEG chains. (Double bands for the PVX CPs at ~ 25 kDa can be explained by a proteolytic cleavage that can occur during purification – this cleavage does not effect the reactivity of the particles nor does it compromise the structural integrity of the samples.)

Table S1: Fluorophore and PEG-loading per PVX for the various A/V-PVX-PEG formulations used in each experiment.

Experiment		PVX	PVX-P5L	PVX-P5B	PVX-P20	PVX-P10B
PK ^a	A647/PVX	334, 170 ^b	n/a	205	496	n/a
	PEG/PVX	n/a	n/a	470	308	n/a
Biodistribution ^a	VivoTag or A647 ^c /PVX	354, 427 ^b	n/a	204	300, 177 ^b	n/a
	PEG/PVX	n/a	n/a	444	566, 465 ^b	n/a
Immunogenicity	A647/PVX	n/a	n/a	n/a	n/a	n/a
	PEG/PVX	n/a	501	585	494	n/a
Sandwich ELISA	A647/PVX	n/a	n/a	n/a	n/a	n/a
	PEG/PVX	n/a	n/a	533	597	609
FACS (RAW) ^b	A647/PVX	592, 461	592, 461	592, 461	592, 461	n/a
	PEG/PVX	n/a	317, 468	328, 471	440, 389	n/a
FACS (BMDC)	A647/PVX	461	461	461	461	n/a
	PEG/PVX	n/a	468	471	389	n/a
Cytokine	A647/PVX	n/a	n/a	n/a	n/a	n/a
	PEG/PVX	n/a	n/a	543	454	n/a

^aResults were normalized for dye loading using a separate standard curve for each particle formulation. ^bSamples were made separately for three studies; data were normalized for each experiment. ^cVivoTag was used for FMT and A647 was used for A-P20 tissue sections and biodistribution.