

Supplementary Material

Next-generation Adjuvant Systems containing Furfurman Drives Potent Adaptive Immunity and Host Defense as a Foot-and-Mouth Disease Vaccine Adjuvant

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1 Supplementary Tables and Figures

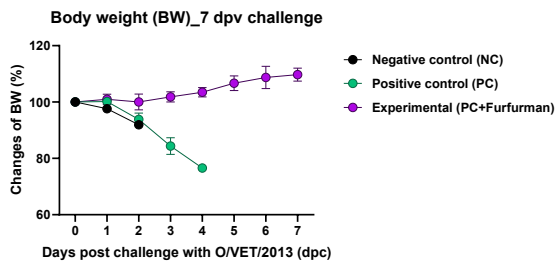
1.1 Supplementary Table

Supplementary Table 1. List of primer sequences for qRT-PCR.

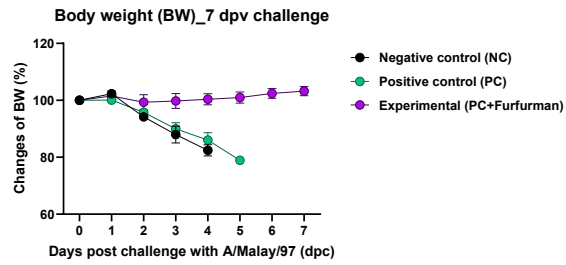
Target	Forward/Reverse	Sequence (5'- 3')	Length (mer)
<i>ifna</i>	<i>ifna</i> F	CATCTGCTCTCTGGGCTGTG	20
	<i>ifna</i> R	TGAGGGGATCCAAAGTCCCT	20
<i>ifnb</i>	<i>ifnb</i> F	TGCAACCACCACAATTCCAGA	21
	<i>ifnb</i> R	GGTTTCATTCCAGCCAGTGC	20
<i>ifnγ</i>	<i>ifnγ</i> F	GCCATTCAAAGGAGCATGGAT	21
	<i>ifnγ</i> R	CTGATGGCTTTGCGCTGGAT	20
<i>il-1β</i>	<i>il-1β</i> F	AGCCAGTCTTCATTGTTTCAGGT	22
	<i>il-1β</i> R	TCATCTCTTTGGGGCCATCAG	21
<i>il-6</i>	<i>il-6</i> F	CTGCAGTCACAGAACGAGTG	20
	<i>il-6</i> R	CGGCATCAATCTCAGGTGCC	20
<i>il-12p40</i>	<i>il-12p40</i> F	GGAGTATAAGAAGTACAGAGTGG	23
	<i>il-12p40</i> R	GATGTCCCTGATGAAGAAGC	20
<i>hpri</i>	<i>hpri</i> F	CCCAGCGTCGTGATTAGTGA	20
	<i>hpri</i> R	GCCGTTCACTCCTGTCCATA	20

1.2 Supplementary Figure

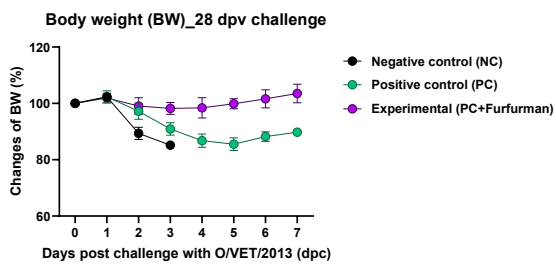
A



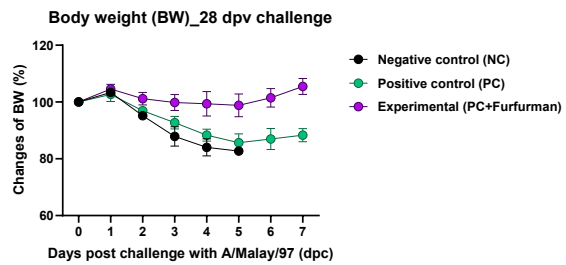
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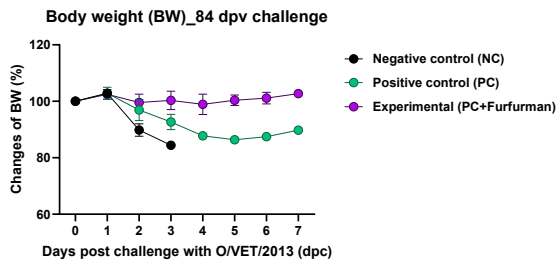
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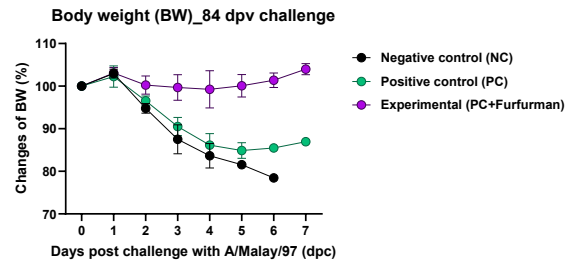
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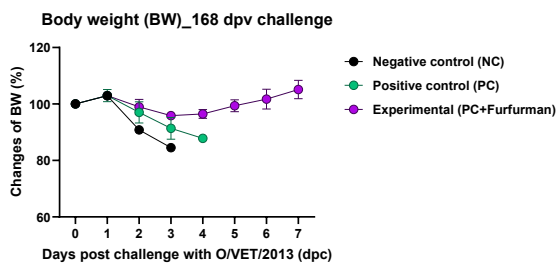
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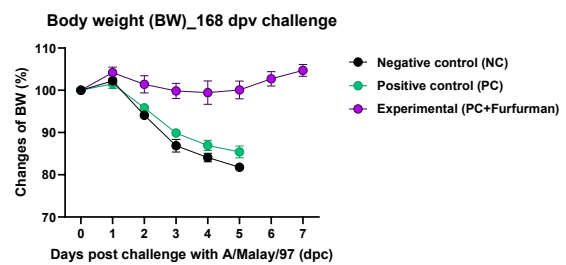
F



G



H



Supplementary Figure 1. Vaccine containing furfurman induces broad-duration host protection against viral infection in mice.

C57BL/6 mice were administered the test vaccine with furfurman (Exp group) or without (PC group). The negative control (NC) group was injected with an equal volume of phosphate-buffered saline (PBS). The test vaccines were injected via the intramuscular route into mice that were later challenged with foot-and-mouth disease virus (FMDV) O (100 lethal dose 50% [LD₅₀] O/VET/2013) or FMDV A (100 LD₅₀ A/Malay/97) at 7, 28, 84, and 168 days post-vaccination (dpv) via the intraperitoneal (IP) route. Survival rates and body weights were monitored for 7 days post-challenge (dpc). (A–H) Body weights post-challenge with O/VET/2013 (A) and A/Malay/97 (B) at 7 dpv; body weights post-challenge with O/VET/2013 (C) and A/Malay/97 (D) at 28 dpv; body weights post-challenge with O/VET/2013 (E) and A/Malay/97 (F) at 84 dpv; body weights post-challenge with O/VET/2013 (G) and A/Malay/97 (H) at 168 dpv. Data are represented as the mean ± SEM of triplicate measurements ($n = 5$ /group).