VIROLOGICA SINICA

## Electronic Supplementary Material

# Interferon as a Mucosal Adjuvant for an Influenza Vaccine in Pigs

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Table S1 Immunization program of inactivated H1N1 and PoIFNα in pigs

| Group ID | PBS | H1N1 | PoIFNα | LIH | HIH |
|---|---|---|---|---|---|
| Antigens | PBS | [a]H1N1 | [b]Low-dose PoIFNα | [b]Low-dose PoIFNα and [a]H1N1 | [c]High-dose PoIFNα and [a]H1N1 |
| Dose | 2 mL per pig | 2 mL per pig | 2 mL per pig | 2 mL PoIFNα and 2 mL H1N1 per pig | 2 mL PoIFNα and 2 mL H1N1 per pig |

[a]The virus was propagated in specific pathogen-free embryonated chicken eggs and the harvested allantoic fluid containing virus was inactivated by adding 0.1% formalin (v/v) and maintained at 37 °C for 24 h. Virus inactivation was confirmed by inoculating an aliquot of the formalin-treated viruses into embryonated eggs to verify that the harvested allantoic fluid was negative for hemagglutination.

[b]The calculated final amount of PoIFNα was $6 \times 10^2$ U/kg based on the mean weight of the group.

[c]The calculated final amount of PoIFNα was $3 \times 10^3$ U/kg based on the mean weight of the group.

Table S2 Primer sequences used in this study

| Primer name | | Sequence (5′-3′) | Accession no./references |
|---|---|---|---|
| CCR9 | Forward<br>Reverse | CCAGATGACTACGGCTATGAC<br>GGCACCCACGATGAACAC | (Meurens *et al.* 2006) |
| CCR10 | Forward<br>Reverse | GCCCGCAGAGCAGGTTTCC<br>CAAAGAGACACTGGGTTGGAAG | (Meurens *et al.* 2006) |
| IL-2 | Forward<br>Reverse | ACAGTTGCTTTTGAAGGAAGTTAAGAA<br>CCTGCTTGGGCATGTAAAATTT | (Dawson *et al.* 2005) |
| IL-18 | Forward<br>Reverse | GCTGAAAACGATGAAGACCTG<br>GGCTTGATGTCCCTGGTTAAT | AF191088.1 |
| IFN-γ | Forward<br>Reverse | AATGGTAGCTCTGGGAAACTG<br>ACTTCTCTTCCGCTTTCTTAGG | (Lee and Lee 2012) |
| IL-6 | Forward<br>Reverse | CTGGCAGAAAACAACCTGAACC<br>TGATTCTCATCAAGCAGGTCTCC | (Duvigneau *et al.* 2005) |
| IL-10 | Forward<br>Reverse | CGGCGCTGTCATCAATTTCTG<br>CCCCTCTCTTGGAGCTTGCTA | (Duvigneau *et al.* 2005) |

Table S3 Antiviral activities of PoIFNα toward different cell lines

| IFN | Antiviral activity ($\times 10^7$ U/mg) for each cell line | | | |
|---|---|---|---|---|
| | VSV/MDCK | VSV/MDBK | VSV/PK15 | VSV/WISH |
| PoIFNα | 103 | 290 | 8.3 | 5.6 |

Data are means ± S.E.M (n = 3).

**References**

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