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

<table>
<thead>
<tr>
<th>Group ID</th>
<th>PBS</th>
<th>H1N1</th>
<th>PoIFNα</th>
<th>LIH</th>
<th>HIH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antigens</td>
<td>PBS</td>
<td>2 mL per pig</td>
<td>2 mL per pig</td>
<td>2 mL PoIFNα and 2 mL H1N1 per pig</td>
<td>2 mL PoIFNα and 2 mL H1N1 per pig</td>
</tr>
<tr>
<td>Dose</td>
<td>2 mL per pig</td>
<td>2 mL per pig</td>
<td>2 mL per pig</td>
<td>2 mL PoIFNα and 2 mL H1N1 per pig</td>
<td>2 mL PoIFNα and 2 mL H1N1 per pig</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Primer name</th>
<th>Sequence (5′-3′)</th>
<th>Accession no./references</th>
</tr>
</thead>
</table>
| CCR9        | Forward: CCAGATGACTACGGCTATGAC  
              Reverse: GGCACCCACGATGAACAC | (Meurens et al. 2006) |
| CCR10       | Forward: GCCCCGAGGAGGTTTTCC  
              Reverse: CAAAGAGACACTGGGTTGGAAG | (Meurens et al. 2006) |
| IL-2        | Forward: ACAGTTGCTTTTGAAGGAAGTAAAGGA  
              Reverse: CCTGCTTGGGCATGTAATAATT | (Dawson et al. 2005) |
| IL-18       | Forward: GCTGAAAAACGATGAAGACCTG  
              Reverse: GGCTTGATGTCCCTGGTTAAT | AF191088.1 |
| IFN-γ       | Forward: AATGGTAGCTCTGGGAACACTG  
              Reverse: ACTTCTTCTCCGCTTTTCTTAGG | (Lee and Lee 2012) |
| IL-6        | Forward: CTGGCAGAAAACAACCTGAACC  
              Reverse: TGATTCTCATCAAGCAGGTCTCC | (Duvigneau et al. 2005) |
| IL-10       | Forward: CGGCCTGTCTCAATTCTTCG  
              Reverse: CCCCTCTCTGGAGCTTGCATA | (Duvigneau et al. 2005) |

Table S3  Antiviral activities of PoIFNα toward different cell lines

<table>
<thead>
<tr>
<th>IFN</th>
<th>Antiviral activity (×10^7 U/mg) for each cell line</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VSV/MDCK</td>
</tr>
<tr>
<td>PoIFNα</td>
<td>103</td>
</tr>
</tbody>
</table>

Data are means ± S.E.M (n = 3).

References


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