

Table S5. Cloacal shedding. The ratio of chickens positive for viral shedding through the cloacal (CL) route to the number of virus-inoculated chickens. The chickens inoculated by the intranasal (IN) and intratracheal (IT) route with eight strains of low pathogenic avian influenza (LPAI) viruses ($10^{5.3}$ median egg infectious dose (EID₅₀) per bird). The swabs were taken daily from live birds to 7 days post inoculation (dpi) for virus detection by influenza virus-specific PCR (M-PCR). Viral titres for positive samples are expressed as the mean equivalent log₁₀ EID₅₀/ml titre \pm standard deviation (SD). The onset of viral shedding was calculated based on the positive swabs and is reported as mean dpi \pm SD.

Virus group	0 dpi	1 dpi	2 dpi	3 dpi	4 dpi	5 dpi	6 dpi	7 dpi	Total	Onset of viral shedding (dpi)
H3N8 NS allele A	0/20	0/20	1/16 (6.3)	1/12 (6.6)	2/8 (4.9 \pm 2.7)	1/8 (6.2)	1/4 (4.8)	2/4 (3.7 \pm 1.0)	2/20 (5.1 \pm 1.6)	3.0 \pm 1.4
H3N8 NS allele B	0/20	0/20	1/16 (7.9)	3/12 (4.7 \pm 2.4)	2/8 (6.1 \pm 0.3)	2/8 (5.9 \pm 0.6)	2/4 (4.7 \pm 2.3)	2/4 (6.8 \pm 0.4)	7/20 (6.0 \pm 1.3)	4.1 \pm 1.8
H4N6 NS allele A	0/20	0/20	0/16	0/12	0/8	0/8	0/4	0/4	0/20	na
H4N6 NS allele B	0/20	0/20	0/16	0/12	0/8	0/8	0/4	0/4	0/20	na
H8N4 NS allele A	0/20	0/20	0/16	1/12 (4.9)	2/8 (3.5 \pm 1.1)	2/8 (5.5 \pm 0.2)	2/4 (4.6 \pm 0.3)	2/4 (4.9 \pm 0.6)	3/20 (4.7 \pm 0.9)	4.0 \pm 1.0
H8N4 NS allele B	0/20	0/20	0/16	0/12	0/8	0/8	0/4	0/4	0/20	na
H9N2 NS allele A	0/20	0/20	0/16	0/12	0/8	0/8	0/4	0/4	0/20	na
H9N2 NS allele B	0/20	0/20	0/16	0/12	0/8	0/8	0/4	0/4	0/20	na

CL, cloacal; dpi, days post inoculation; NS, nonstructural protein