**Virologica Sinica**

**Supplementary Data**

**Enhanced pathogenicity and transmissibility of H9N2 avian influenza virus in mammals by hemagglutinin mutations combined with PB2-627K**

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| --- | --- | --- | --- |
| Strains | Host | Collection date | Characteristics |
| EID50/0.1 mLb | TCID50/0.1 mLc | IVPId | MLD50e |
| AH320a | Chicken | 2015.02 | 108.3 | 107.5 | 0 | > 106.5 |

**Supplementary Table S1** Biological Characterizations of AH320.

a AH320, A/chicken/Eastern China/AH320/2015;

b EID50, 50% egg infectious dose;

c TCID50, 50% tissue culture infectious dose;

d IVPI, intravenous pathogenicity index (determined in chickens);

e MLD50, 50% lethal dose in mice (expressed as the EID50 value corresponding to 1 LD50).



**Supplementary Fig. S1** Receptor binding properties of AH320. The control viruses of A/California/04/2009 (H1N1 (CA04)) and A/mallard/Huadong/S/2005 (H5N1 (HD05)) showed an absolute preference for human-type (SAα-2,6Gal) and avian-type (SAα-2,3Gal), respectively. Direct binding of viruses to sialyl glycopolymers containing either 3′SLNPAA or 6′SLN-PAA was measured. The data shown are representative the mean of three independent binding experiments.