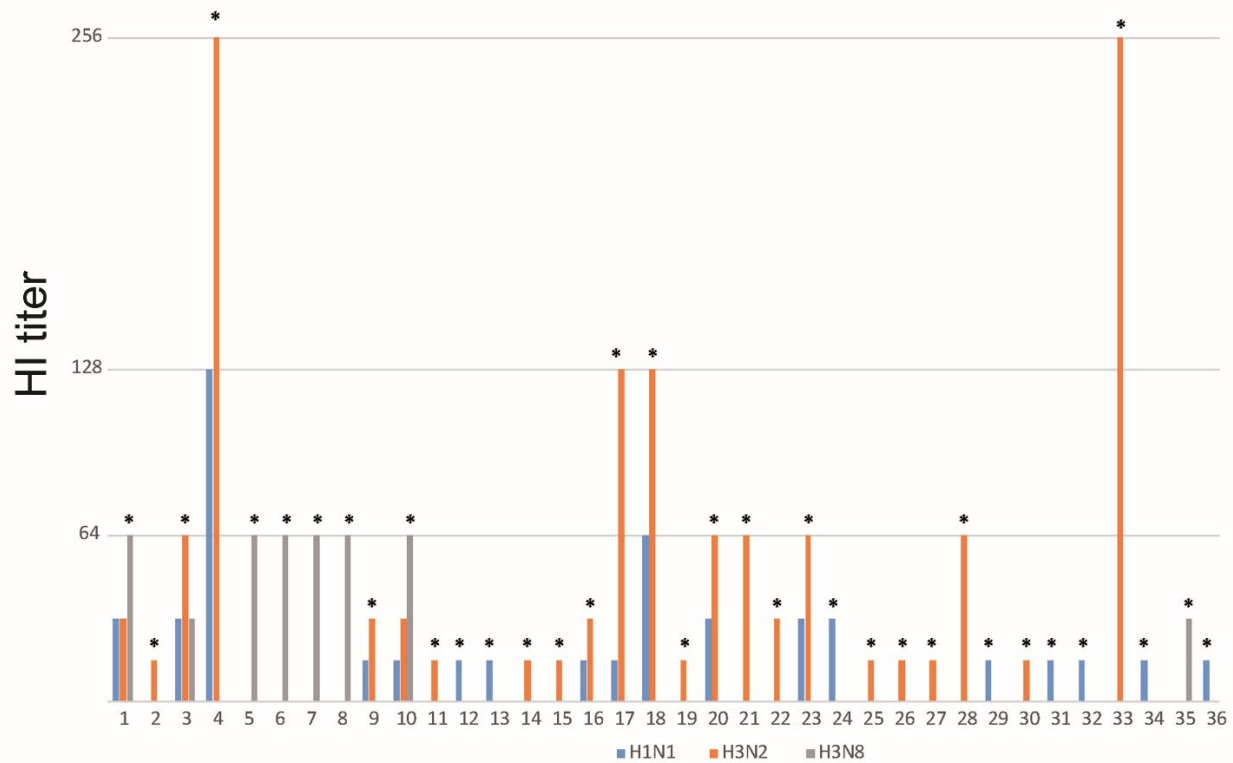


Supplementary Table 1. Sequence identity matrix of hemagglutinin amino acid sequences of equine, swine, and canine influenza A virus subtype H3.

Sequence identity matrix	H3N8/Poland/A/ equine/Pulawy/ 1/2008	H3N2/Poland/A/ swine/Poland/ 04711/2013
H3N8/Poland/A/equine/Pulawy/1/2008		0.81
H3N8/USA A/canine/Maine/058124/2016	0.947	0.8
H3N8/USA A/canine/Massachusetts/26810/2016	0.948	0.801
H3N8/USA A/canine/New_York/159903/2012	0.948	0.801
H3N8/USA A/canine/NY/159903/2012	0.948	0.801
H3N8/USA A/canine/Vermont/278213/2013	0.948	0.801
H3N8/USA A/canine/VT/11039/2013	0.947	0.8
H3N8/USA A/canine/VT/2782/2013	0.948	0.801
H3N8/China A/canine/Zhejiang/S34/2015	0.859	0.852
H3N2/Poland/A/swine/Poland/04711/2013	0.81	
H3N2/USA A/Canis_lupus_familiaris/USA/007780/2018	0.847	0.863
H3N2/USA A/canine/Nevada/BRW015/2018	0.844	0.862
H3N2/USA A/canine/Nevada/BRW018/2018	0.844	0.862
H3N2/USA A/canine/New_York/CRP034/2018	0.844	0.862
H3N2/USA A/canine/New_Jersey/CRP036/2018	0.844	0.862
H3N2/USA A/Canis_lupus_familiaris/USA/150620/2018	0.844	0.862
H3N2/USA A/Canis_lupus_familiaris/USA/152386/2018	0.844	0.86
H3N2/China A/canine/China/Shanghai_0103_2019/2019	0.84	0.86
H3N2/China A/canine/China/Shanghai_0103_2020/2019	0.84	0.86
H3N2/China A/canine/China/Shanghai_0103_2021/2019	0.842	0.862
H3N2/China A/canine/China/Shanghai_0103_2022/2019	0.84	0.862
H3N2/China A/canine/China/Shanghai_0103_2024/2019	0.842	0.862
H3N2/China A/canine/China/Shanghai_0103_2023/2019	0.838	0.858
H3N2/China A/canine/China/Shanghai_0315_2019/2019	0.838	0.858



Supplementary Figure 1. Hemagglutination inhibition titers of canine sera for equine H3N8, swine H3N2, and swine H1N1pdm subtypes of influenza A virus. Asterisk (*) denotes the highest titer obtained.