

Supplemental Material

Supplementary Figure 1. Gating strategy and representative plots of HA full-length and stem-specific memory B cells. (A) PBMCs are gated on lymphocytes, single cells, CD19⁺CD20⁺Live-Dead/Dump⁻ followed by CD27⁺IgD⁻IgG⁺ memory B cells that are H5 (A/Vietnam/1203/2004) probe⁺. Representative plots of (B) H5⁺ head-specific and H5⁺H1⁺double positive stem-specific B cells 7 days post-IIV boost were tested for HA stem specificity with a stabilized-group 1 stem probe.

1 **Supplementary Table 1.** Neutralising antibody titers to heterologous influenza viruses

<i>Virus</i>	<i>Animal #</i>	<i>Days post initial vaccination</i>				
		<i>0^b</i>	<i>28^c</i>	<i>35</i>	<i>42</i>	<i>56</i>
<i>pLAIV-pHIV:</i>						
<i>A/Brisbane/59/2007</i> <i>(H1N1)</i>	7735	<5	<5	<5	<5	<5
	7837	<5	<5	<5	<5	<5
	7843	<5	<5	<5	<5	<5
	7777	<5	<5	<5	<5	<5
<i>pLAIV-sHIV:</i>						
	78<56	<5	<5	<5	<5	<5
	8392	<5	<5	<5	<5	<5
	8555	<5	<5	<5	<5	<5
	8577	<5	<5	<5	<5	<5
<i>pLAIV-pHIV:</i>						
<i>A/New Caledonia/20/1999</i> <i>(H1N1)</i>	7735	<5	<5	<5	<5	<5
	7837	<5	<5	<5	<5	<5
	7843	<5	<5	<5	<5	<5
	7777	<5	<5	<5	<5	<5
<i>pLAIV-sHIV:</i>						
	7856	<5	<5	<5	<5	<5
	8392	<5	<5	<5	<5	<5
	8555	<5	<5	<5	<5	<5
	8577	<5	<5	<5	<5	<5
<i>pLAIV-pHIV:</i>						
<i>A/Japan/305/1957</i> <i>(H2N2)</i>	7735	<5	<5	<5	<5	<5
	7837	<5	<5	<5	<5	<5
	7843	<5	<5	<5	<5	<5

		7777	<5	<5	<5	<5	<5
	pLAIV-sIIV:						
		7856	<5	<5	<5	<5	<5
		8392	<5	<5	<5	<5	<5
		8555	<5	<5	<5	<5	<5
		8577	<5	<5	<5	<5	<5
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	pLAIV-pIIV:						
		7735	<5	<5	<5	<5	<5
		7837	<5	<5	<5	<5	<5
		7843	<5	<5	<5	<5	<5
<i>A/Teal/HK/W132/1997</i>		7777	<5	<5	<5	<5	<5
<i>(H6N1)</i>	pLAIV-sIIV:						
		7856	<5	<5	<5	<5	<5
		8392	<5	<5	<5	<5	<5
		8555	<5	<5	<5	<5	<5
		8577	<5	<5	<5	<5	<5

^a MN titers are expressed as the serum dilution that inhibited infectivity of 100

TCID₅₀ of virus in a MN assay using MDCK cells. The lower limit of detection was

5. Antibody titers from individual animals are listed.

^b At day 0 AGMs were vaccinated A/Vietnam/1203/04 (H5N1) pLAIV intranasally

^c At day 28 AGMs were boosted with either matched H5N1 A/Vietnam/1203/04 (H5N1) pIIV or mismatched sIIV (trivalent vaccine containing A/California/04/2009 (H1N1pdm09), A/Perth/16/2009 (H3N2) and B/Brisbane/60/08 viruses)