

**Supplementary table S1.**

**Summary of groups and outcomes after experimental infection with Ab4 or**

**Ab4ΔORF2 nine-months prior to this experimental EHV-1 Ab4 challenge infection <sup>a</sup>.**

	<b>Control</b>	<b>Ab4ΔORF2</b>	<b>Ab4</b>
Infection	Not infected	Ab4ΔORF2 <sup>b</sup>	Ab4 <sup>b</sup>
Horses (n)	8 per group		
Sex	4 mares and 4 geldings per group		
Age, median (range)	2 (2-3 years)	3 (2-4 years)	3 (2-3 years)
Fever (>38.5°C)	none	Reduced initial fever	Fever peak 36-60 h pi <sup>c</sup>
Clinical signs	none	Mild respiratory disease	
Nasal virus shedding <sup>d</sup>	none	7/8 horses, lower viral amounts than in Ab4 group	7/8 horses
Cell-associated viremia <sup>e</sup>	none	All horses, similar in both groups	
Intranasal immunity <sup>f</sup>	none	Intranasal antibody response	
Systemic antibody response <sup>f</sup>	none	Strong systemic antibody response	
Systemic cellular response <sup>g</sup>	none	Undetectable T cell response	

<sup>a</sup> Full description in Schnabel *et al.*, 2018, BMC Vet Res;

<https://doi.org/10.1186/s12917-018-1563-4>

<sup>b</sup> Horses were infected intranasally with  $1 \times 10^7$  plaque forming units (PFU)

<sup>c</sup> pi = post infection

<sup>d</sup> measured by virus isolation

<sup>e</sup> analyzed by real-time PCR in PBMC using the EHV-1 gB gene

<sup>f</sup> EHV-1 gB, gC, and gD-specific antibody quantification using a fluorescent bead-based multiplex assay

<sup>g</sup> evaluated by flow cytometric analysis of IFN- $\gamma$  producing T-cells in PBMC after re-stimulation with EHV-1 *in vitro*