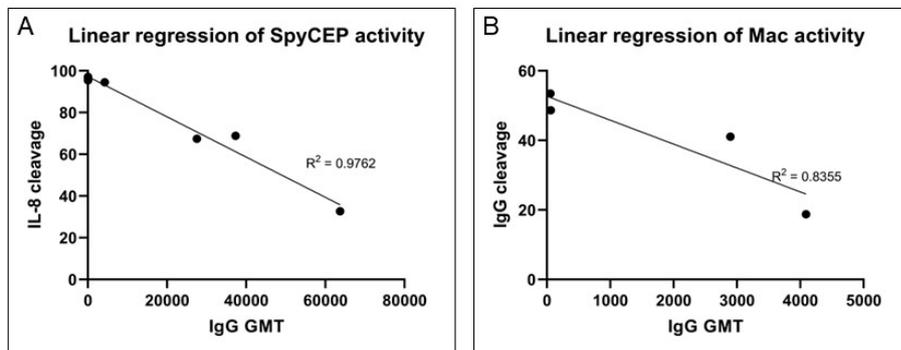


Supplementary Figure S1: Mucosal IgA response to vaccine antigens between D21 and D36

A distal IgA response was tested for SpyCEP (**A**) and Cpa (**B**) from Day 21 (light grey) and terminal (D36) faecal samples (dark grey) for individual mice for sublingual (SL), intranasal (IN) and PBS control (IN) with adjuvant. Kruskal-Wallis ANOVA was performed to compare groups with the PBS control. * $p < 0.05$; ** $p < 0.01$.



Supplementary Figure S2: SpyCEP and Mac neutralisation activity correlates with antibody geometric mean titre

Linear regression curves were plotted with cleavage activity against geometric mean titre of serum IgG. SpyCEP (**A**) were calculated from neat dilutions and Mac (**B**) from 1:10 dilutions.