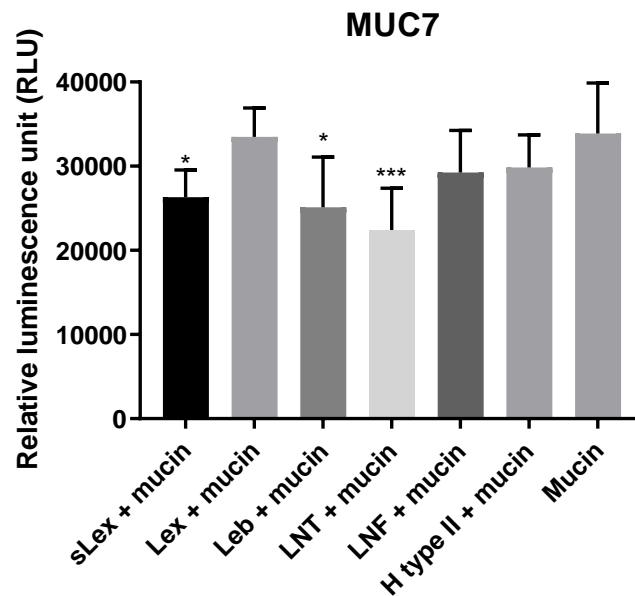
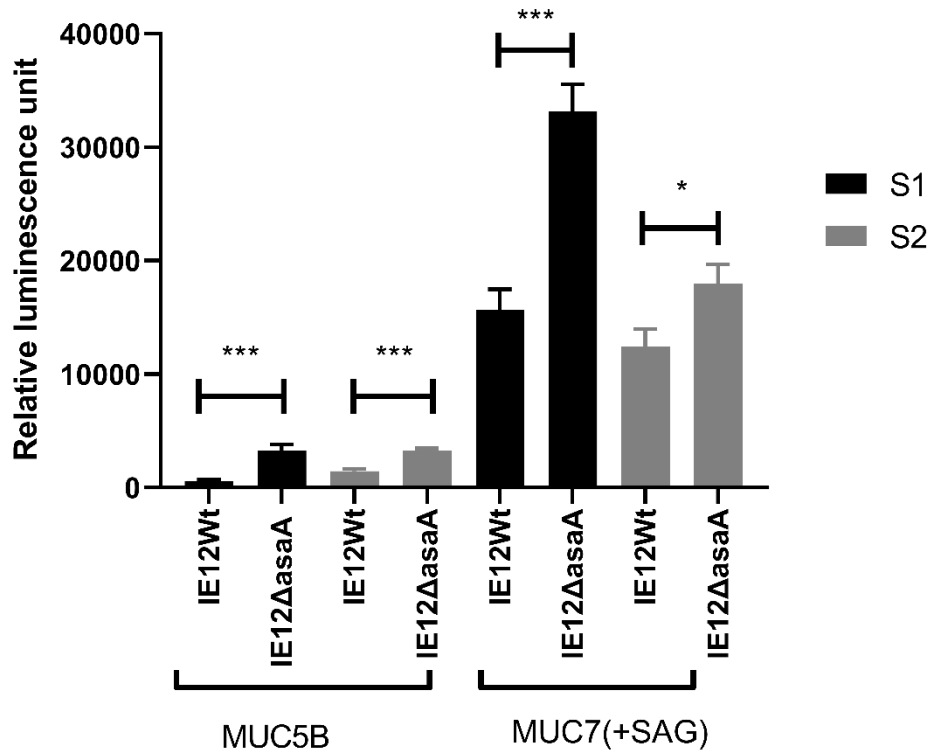


## Supplementary material

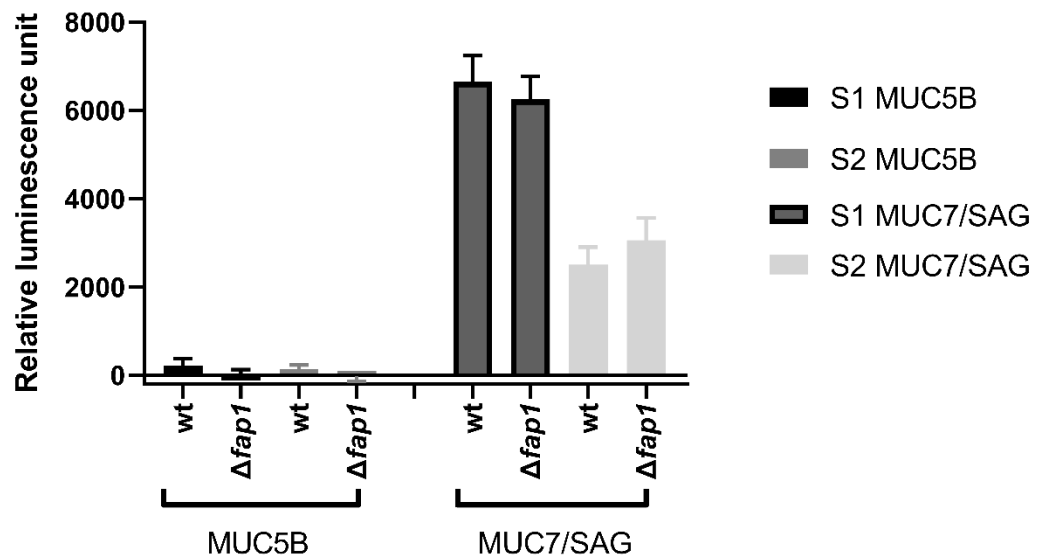


**Supplementary Figure 1. Inhibition of *S. oralis* subsp. *oralis* IE12 binding to MUC7 using glycoconjugates.** The MUC7/SAG rich sample from donor 2 was used in the analysis. *S. oralis* IE12 WT was pre-treated with 50 ug/mL Leb-HSA, sLex-APD-HSA, Lex-APD-HSA, LNT-APD-HSA, LNF-APD-HSA or H type 2-APD-HSA prior to use in the microtiter-based mucin binding assay. The background control was subtracted from the data shown. The bars represent mean  $\pm$  SEM, \*\*\* $p$ <0.001, \* $p$ <0.05; One-way ANOVA, Dunnett's post hoc test.



**Supplementary Figure 2. Binding of *S. oralis* subsp. *oralis* IE12 WT and an isogenic *asaA* deletion mutant (IE12Δ *asaA*) to salivary mucins.** IE12 WT and IE12Δ *asaA* binding to MUC5B rich and MUC7/SAG rich samples from a blood group B donor (S1) and a blood group A donor (S2) was analysed using a microtiter plate-based assay. The background control was subtracted from the data shown. The bars represent mean  $\pm$  SEM, \*\*\* $p < 0.001$ , \* $p < 0.05$ ; Student's t-test. The results have been reproduced twice.

**The SRRP Fap1 is not required for binding of *S. oralis* subsp *oralis* ATCC 10557 to MUC7**



**Supplementary Figure 3. Binding of *S. oralis* subsp. *oralis* ATCC 10557 WT and an isogenic *fap1* deletion mutant (ATCC 10557 $\Delta fap1$ ) to salivary mucins.** ATCC 10557 WT and ATCC 10557 $\Delta fap1$  binding to MUC5B rich and MUC7/SAG rich samples from a blood group B donor (S1) and a blood group A donor (S2) was analysed using a microtiter plate-based assay. The background control was subtracted from the data shown. The bars represent mean  $\pm$  SEM (n=16). The results have been reproduced twice and data shown are the pooled results from those two experiments.