

Supplemental Material

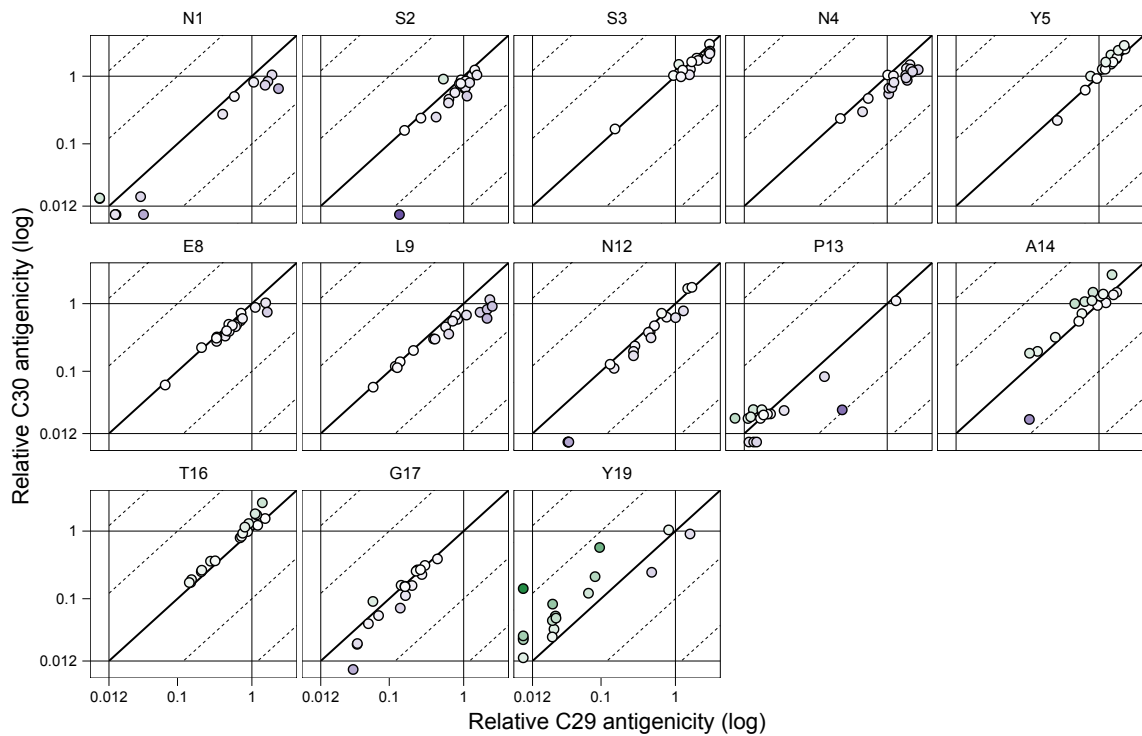


FIG S1. Pairwise comparison of C29 and C30 antigenicities. The panels represent STh amino acid positions, and show the relative C29 antigenicity values (horizontal axis) for each STh mutant plotted against the relative C30 antigenicity values (vertical axis). C29 antigenicity and C30 antigenicity was measured using two anti-STp mAb (C29 and C30) ELISAs. Mutants with non-measurable antigenicity for one mAb were plotted outside the scale to the left (C29; <0.012) or bottom (C30; <0.012). The diagonal lines represent the C30 antigenicity-C29 antigenicity ratio (fold change): the full line represents a fold change of one, the dotted lines to the left represent fold changes of 10 and 100, and those to the right -10 and -100. In total 236 mutants are represented. Mutants of the cysteine residue positions were not screened.

TABLE S1. Number of missing and assigned values for the six screen datasets and assay thresholds used to assign missing values.

	α STh	α STp	ST:G8	C29	C30	toxicity
Measured mutants	361	361	247	247	247	355
Observations	222	173	225	228	224	240
Assigned values	51	59	14	14	13	38
Observed/assigned	273	232	239	242	237	278
Assay threshold	0.0034	0.017	0.003	0.013	0.013	0.0014