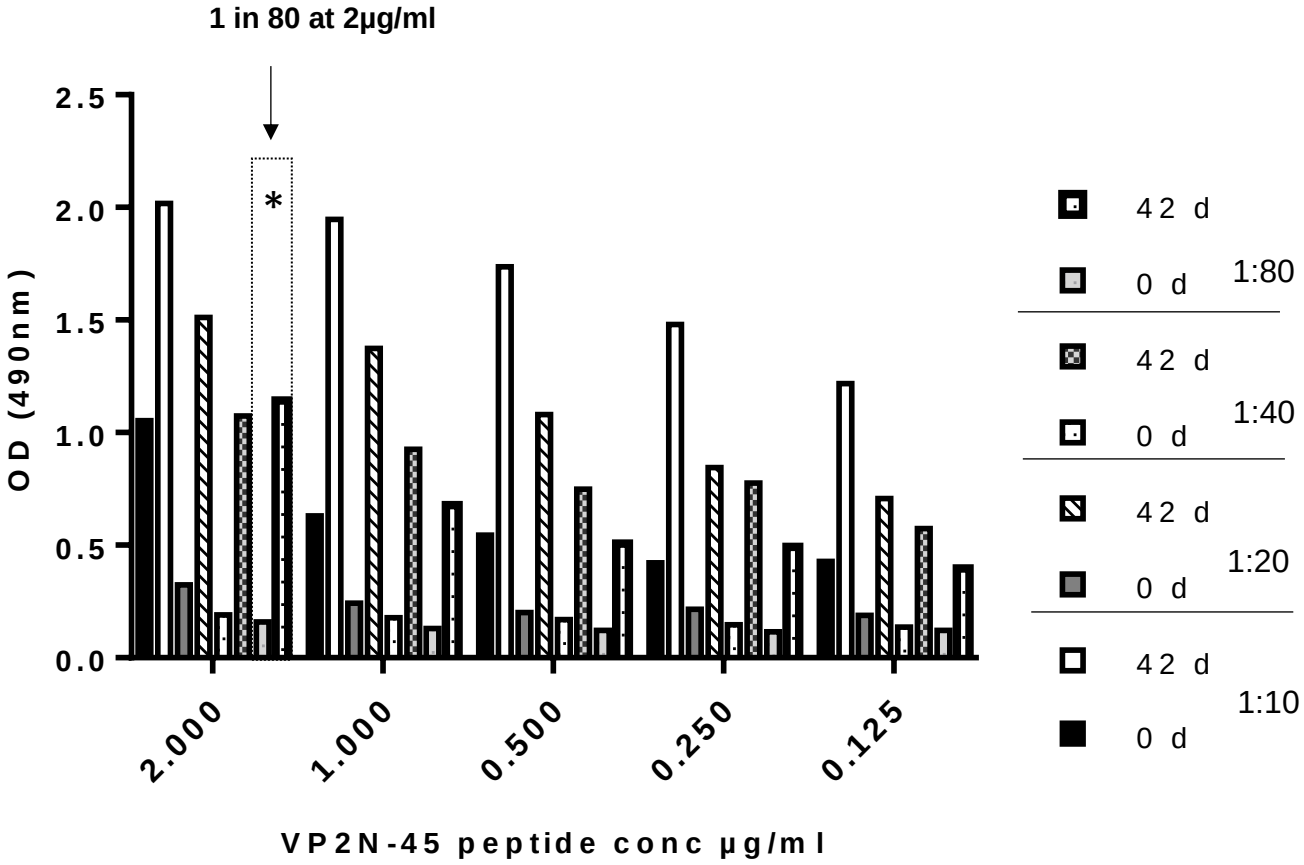
Supplementary figures

(a)



(b)

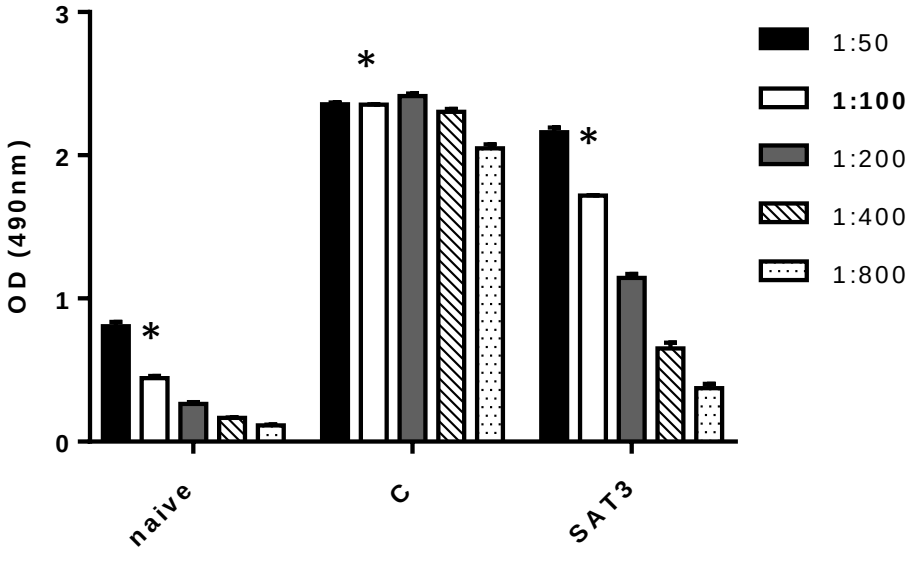


Fig S1. Optimisation of the peptide ELISA using different concentrations of peptide and dilution of the serum of serotype O from infected animal. **(a)** Checkerboard ELISA with negative (0 d) and positive (42 d) sera diluted from 1:10 to 1:80 (as shown in key) and with peptide concentration in the range 0.125-2μg/ml. The optimal conditions for signal to background are highlighted with a box (2μg/ml of peptide and 1 in 80 serum dilution). **(b)** Reactivity with VP2N45 peptide at 2μg/ml of different dilutions of a strong responder serum sample (type C) and a weak responder serum sample (type SAT3). The asterisk denotes the best conditions of peptide at 2μg/ml and sera diluted 1:100.

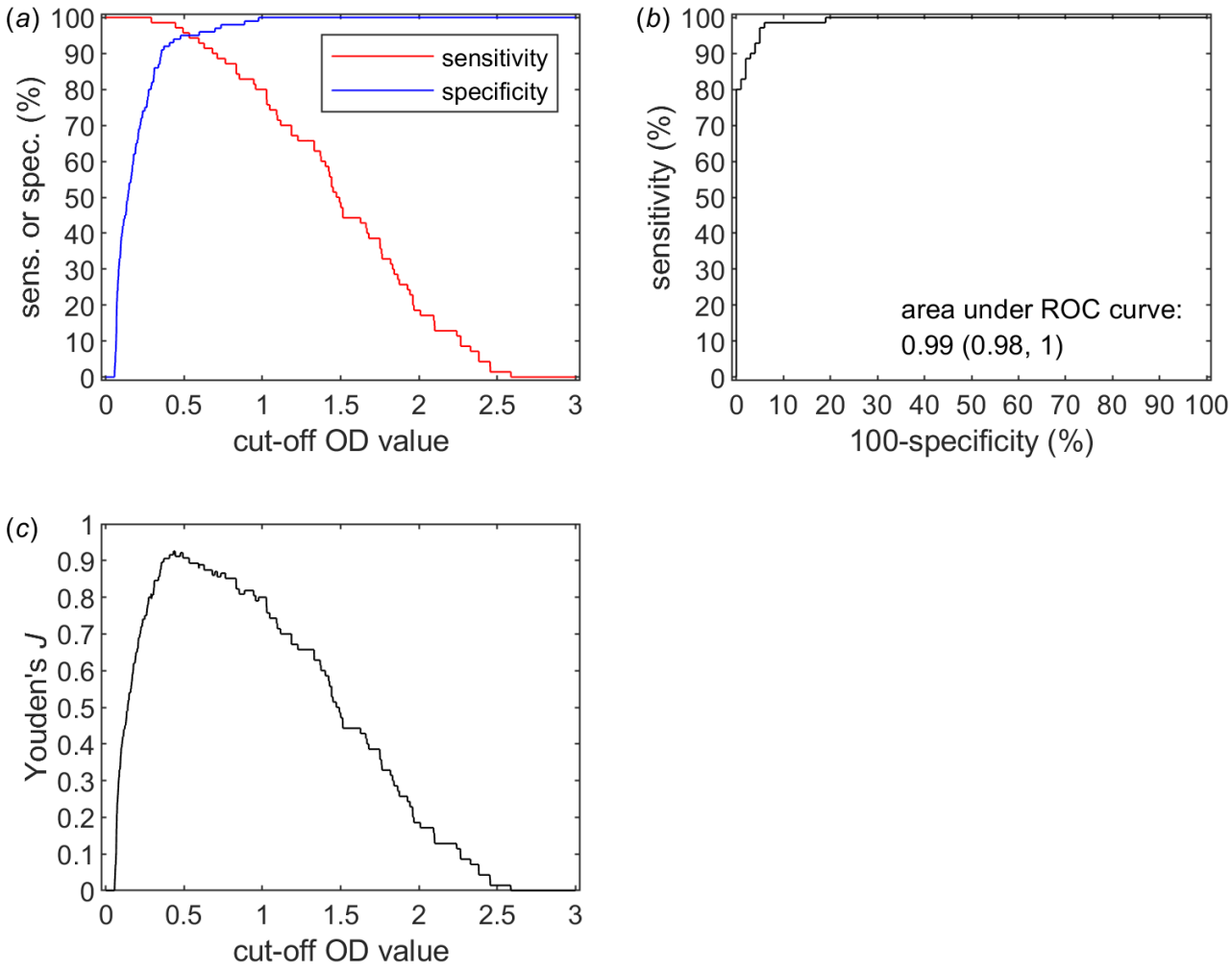


Fig S2. Receiver operating characteristic (ROC) analysis to determine the cut off value for the VP2 ELISA. (a) Sensitivity and specificity of the VP2 ELISA at different cut-offs. (b) Empirical ROC curve for the VP2 ELISA. The area under the curve is a measure of the discriminatory power of the test (with one corresponding to perfect discrimination). (c) Youden's *J* (sensitivity+specificity-1) as a function of cut-off for the VP2 ELISA. This measures the probability of making an informed decision, with the cut-off being that which maximises *J* (in this 0.43) (Greiner et al., 2000).