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# Staphylococcal Protein-A and Chimeric Protein-LAG sandwich ELISA

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1 Works for me dx.doi.org/10.17504/protocols.io.bta5nig6

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#### SUBMIT TO PLOS ONE

#### ABSTRACT

This ELISA was used to study the interactions between Staphylococcal protein-A (SpA) and protein-LAG (PLAG) with different immunoglobulin preparations from mammalian and avian species.

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- This ELISA was used to study the interactions between Staphylococcal protein-A (SpA) and protein-LAG (PLAG) with different immunoglobulin preparations from mammalian and avian species. The 96 well microtiter plate was coated overnight at 4°C with 2 μg/μl per well of SpA in carbonate-bicarbonate buffer pH 9.6.
- The plate was then treated with bovine serum albumin solution and washed 4X with PBS-Tween. 50 μl of immunoglobulins (1 mg/ml) is added and incubated for 1h at room temperature, and the microplate is rewashed 4X with PBS-Tween.
- Then, 50 μL of peroxidase-labeled PLAG conjugate diluted 1:5000 in PBS-non-fat milk was added to each well and incubated for 1h at RT. The plate was washed 4X with PBS-Tween.

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- Then, 50  $\mu$ L of o-phenylenediamine solution (4 mg/mL) was added, and the plate was incubated for 15 min at RT in the dark. The reaction was stopped with 50  $\mu$ L of a 3M H2SO4 solution.
- The plate was visually assessed for color development and read on a microplate reader at 492 nm. A cut-off point was calculated as the mean of the optical density of the negative controls multiplied by two. The cut-off value was set to 0.32.