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Universal sandwich ELISA for investigating the binding of avian immunoglobulins to Streptococcal protein-G (SpG) using anti-IgY-peroxidase conjugate.

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MATERIALS

NAME	CATALOG #	VENDOR
Anti-Chicken IgY, HRP Conjugate, 300ul	G1351	Promega
Streptococcal protein G by Sigma Aldrich		

- 1 This ELISA is used to study the interaction of streptococcal protein-G (SpG) with different avian immunoglobulins.
- 2 The 96 well microtitre plate is coated overnight at 4°C with 2 µg/µl per well of SpG in carbonate-bicarbonate buffer pH 9.6.
- 3 Then plate is treated with bovine serum albumin solution and washed 4X with PBS-Tween.

- 4 50 µl of avian egg yolk or egg white (1 mg/ml) is added and incubated for 1.30h at room temperature and the microplate is then rewashed 4X with PBS-Tween.
- 5 Then 50 µl of peroxidase-labeled-anti-IgY conjugate diluted 1:15000 in PBS-non-fat milk is added to each well and incubated for 1.30h at RT. The plate is washed 4X with PBS-Tween.
- 6 Pipette 50 µl of TMB (Sigma-Aldrich) to each well.
- 7 The reaction is stopped with 50 µl of 3M H₂SO₄ solution.
- 8 The plate is visually assessed for the development of colour and read in a microplate reader at 450 nm.
- 9 A cut-off point should be calculated as the mean of the optical density of negative controls x 3. The higher the OD value the higher will be the affinity of SpG to mammalian immunoglobulins.