Purification of avian egg yolk immunoglobulins using the water dilution method and precipitation with isopropanol.

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Protocol status: Working
We use this protocol and it's working

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1. Separate egg yolk from the egg white.

2. Add nine parts of distilled water to one part egg yolk.

3. Mix and stir slowly for 6.30 h at 4°C.

4. Centrifuge at 10 000 × g, at 4°C for 25 min to precipitate the lipids.

5. Collect the supernatant containing the IgY (water soluble fraction).

6. Slowly add 5 ml of cold isopropanol to the preparation, stirring constantly, and centrifuge at low speed.

7. Dilute the precipitate in PBS and adjust pH to 7.6. Calculate the protein concentration by ELISA, spectrophotometry or Bradford method.

8. Determine the purity of the preparation by SDS-PAGE.