

GEroNIMO

Isolation of red blood cells from bird samples

Authors: *Sophie Leroux, David Gourichon (INRAE)*

Contact: *sophie.leroux1@inrae.fr*

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1. Summary

The aim of this protocol is to obtain red blood cells from birds (e.g. chicken / quail).

2. Protocol description

1.1 Required reagents and instruments

Consumables:

- vacuum blood collection tubes EDTA (4ml)
- 2ml tubes
- syringes
- needles (25-27 G)

Equipment:

- Centrifuge 14500 rpm

1.2 Procedure for blood sampling

Collect 1 ml of blood from the jugular vein while holding the animal carefully to ensure safety and minimise stress.

1.3 Procedure for isolating red cells from bird blood

1. After homogenising the blood by inverting the tube, transfer the blood to the 2ml tube
2. Centrifuge for 5 minutes at 2000g at 4°C
3. Collect the plasma (without red blood cells) and transfer it to a tube if it is to be used
4. Discard the remaining plasma, taking a small amount of red blood cells from the interface (in order to remove all the white blood cells present at that interface)
5. Add 150 µl of glycerol/PBS (80/20) to the red blood cells tube and vortex thoroughly to ensure the mixture is well homogenised.