P06 – Plasma collection and whole blood stabilisation

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Protocol:

1. Centrifuge a whole blood sample in the original collection tube at 1.000 – 2.000g/10-15 minutes.

   Note: Meanwhile, bring tubes pre-filled with the Stabiliser **to room temperature** (5 – 10 minutes).

2. Collect separated plasma without disturbing the separated white blood cells and erythrocytes (approx. 50-75% of the column) and aliquot it according to your downstream application requirements.

   Note: If you suspect your plasma samples are contaminated with cells, transfer them to a fresh tube and repeat the centrifugation. Separate and aliquot plasma without disturbing the pellet.

3. Replenish the volume of plasma removed from the tube with blood with PBS and gently resuspend.
4. Transfer equal blood volume to the cryogenic vial containing the Stabiliser reagent (RATIO 1:1).
5. **Mix** the blood sample with the Stabiliser **by flipping** the vial 10-15 times. **Do not** vortex!
6. Incubate at room temperature for 10 minutes.
7. Store the sample until further processing at:
   a. **≤ -80˚C** (long-term storage; whole blood stored for up to 2.5 years kept a stable immune profile in an independent study[1]);
   b. **≤ -20˚C** (short term, up to 3 weeks), then transfer to the ultra-low freezer (**≤ -80˚C**) as soon as possible and keep there until further processing;
   c. or place on **dry ice** and transfer to the ultra-low freezer (**≤ -80˚C**) as soon as possible and keep there until further processing.

[1] *Parthasarathy V. et al., Cytometry Part A (2026), doi: 10.1002/cyto.a.70059.*

Note: After thawing, follow the instructions from P01 protocol:
“**P01 - Processing after sample thawing.**“

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