ISOLATION AND CRYOPRESERVATION OF HUMAN SERUM

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BACKGROUND

This protocol is used to isolate and cryopreserve human serum biospecimens.

MATERIALS

- Participant biospecimen in red top blood collection tube, 10mL (BD Vacutainer serum collection tube, 367820)
- P1000 pipette and tips
- P100 pipette and tips
- Pre labeled cryovials
- Centrifuge

PREPARATION BEFORE SAMPLE COLLECTION

1. Pre label cryovials to contain the following information
    a. Participant ID
    b. Study title
    c. Date of sample collection
    d. Sample type, aliquot number, and volume in tube
        i. Aliquot 1 to contain volume of 100ul
        ii. Aliquot 2 and 3 to contain volume of 1mL
    e. Initials of researcher processing the sample

PROTOCOL

1. Place the tube in an upright position for 30 minutes at room temperature to allow blood to clot
2. Spin the tube at 1,500 g for 10 minutes at room temperature to separate the serum from the clotted blood
    a. Complete separation shown in diagram below
    b. If there appears to be incomplete separation, leave tube upright for 5-10 minutes before isolating serum
3. Aliquot serum into pre labelled cryovials and avoid pipetting clotted blood
    a. Aliquot 1 to contain volume of 100ul
    b. Aliquot 2 and 3 to contain volume of 1mL
4. Bank cryovials at -80°C