

SOP 2.5.2 Blood Collection for Serum

SOP Number: 2.5.2
Version Number 1.0

	Name	Title	Date
Author			
Authoriser			

Effective Date	
Version Number	

Purpose

This SOP describes the procedure for blood collection for serum.

Responsibility

It is the responsibility of the research personnel carrying out this procedure to ensure that all steps are completed both competently and safely.

Equipment/reagent requirements

- Blood collection system
- Personal protective equipment; gloves, laboratory coat, protective glasses
- Blood collection tube: serum separator tube (SST) or plain tube
- A polystyrene container with ice to maintain temperature at 4°C for processing and /or transport to processing laboratory, or alternatively use a water-bath (plus a thermometer) with iced water to maintain the temperature at 4°C or a pre-conditioned gel pack at 4°C
- Centrifuge capable of generating 1,100-1,600g at the bottom of the tube
- Refrigerator (2-4°C) if overnight sample storage is required
- Freezer -20°C/-80°C if short-term storage is required

Procedure

1. Draw blood directly into the evacuated tube. Filling up the blood collection tube to the black mark on the tube label indicates that the correct amount of blood has been drawn.

2. The blood collection tube is appropriately labeled either with a unique study identification number and/or a barcode label generated electronically.
3. Note the time that the sample was taken in the study specific documentation or data management system.
4. Allow the blood to clot for 15 to 30 min at room temperature (RT) (18-22°C). The time for clotting is dependent on tube type so refer to the manufacturer's instructions for use for recommended time for specific tube types.
5. Place tubes in the centrifuge and spin at 1,600g at RT (18-22°C) for 10 min. This speed, time and temperature will minimise platelet contamination of the specimen which may affect sample analysis. Record the time processing was initiated in the study specific documentation or data management system.
6. Using a plastic transfer/Pasteur pipette collect the serum being careful not to disrupt the clot or to collect any of the gel. Transfer the serum (straw coloured liquid) into 0.5mL cryostorage tubes maintained at 4°C which have been labeled as per point 2 above.
7. Transfer tubes to a -80°C freezer for storage. If there is not a -80°C freezer on site store at -20°C. If neither is available transport tubes to the processing laboratory at 4°C in a polystyrene container on ice. The specimen should reach the -80°C freezer within 48 hours of collection. Record the time of storage in the study specific documentation or data management system.

Note: As a general rule samples should be processed and reach the appropriate storage conditions as soon as is practicable. The maximum time limits proposed are guidelines and should be read in association with a study specific protocol.

Change History

SOP Number	Effective Date	Significant Change	Previous SOP No.
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