

### SOP 3.3 Preparation of Serum and Plasma from Blood

SOP Number: 3.3

Version Number 1.0

|            | Name | Title | Date |
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| Author     |      |       |      |
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| Effective Date |  |
| Version Number |  |

#### Purpose

This SOP describes the procedure for preparation of serum and plasma from whole blood.

#### Responsibility

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

#### Equipment/reagent requirements

- A refrigerated centrifuge capable of generating 1,300g
- -80°C Freezer

#### Procedure

1. Centrifuge tubes within 2 hours of collection to separate plasma from cells. Maintain tubes at 4°C during processing. Place the blood collection tubes in a centrifuge and spin at 1,300g for 10 min at 4°C. Record the time processing initiated in the study specific documentation or data management system.
2. Avoid mixing/agitation of tubes between centrifugation and aliquoting as this may lead to mixing and/or re-suspension of cells and platelets on or near the gel surface.
3. Using a plastic Pasteur/transfer pipette collect plasma or serum being sure to avoid collection of cells or the gel. Distribute the plasma among 0.5mL cryostorage tube(s) maintained at 4°C which have been labeled with a unique study identification number and/or bar code label.

4. Transfer tubes to a -80°C freezer and/or liquid nitrogen for storage as soon as is practicable or within 48 hours of collection. Record the time of storage in the study specific documentation or the 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.

### Storage considerations

- All refrigerators and freezers used for samples should have controlled access. A system should be in place to record temperature either using a log book or electronically using an automated temperature recording device. A system should also be in place for sample tracking to facilitate sample retrieval / withdrawal etc.
- Samples should be stored in refrigerators and freezers, separate from standards and reagents.
- Freezing and thawing should be avoided. It is therefore important to prepare sample aliquots in volumes to avoid freeze/thaw cycles. Where this cannot be avoided, the number and duration of thaws should be recorded.

### Change History

| SOP Number | Effective Date | Significant Change | Previous SOP No. |
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