

Circulating Tumor Cells Therapeutic Apheresis: a novel biotechnology enabling personalized therapy for all cancer patients

**SOP.7. Storage and Shipping
Of microsieves and cartridges**

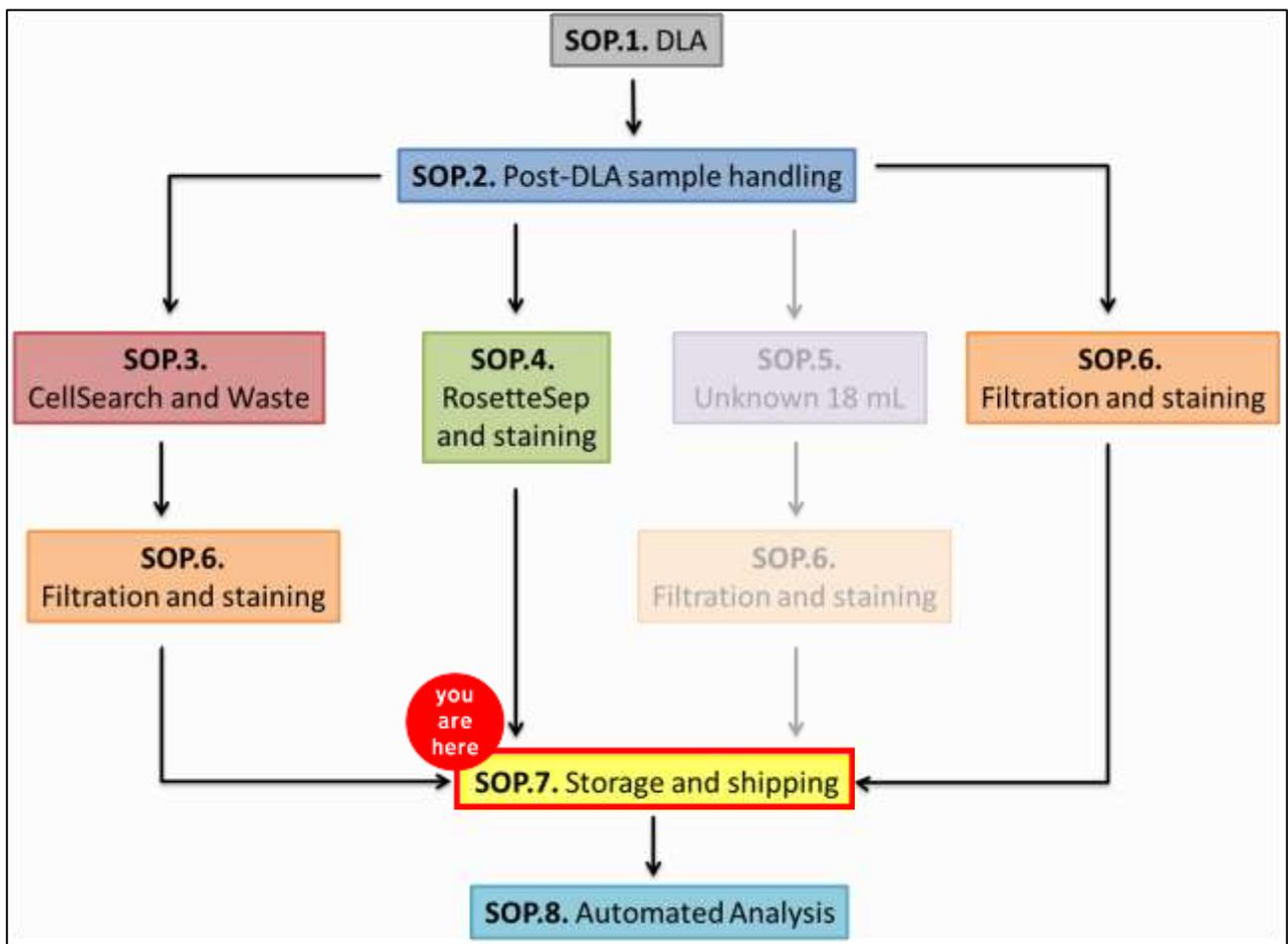


Introduction

This Standard Operating Procedure (SOP) describes the storage and shipping of microsieves and cartridges. These samples come from filtration and staining (**SOP.6.**) and will be analysed with the ICY program (**SOP.8.**).

This is SOP.7. Storage and Shipping; version 1.0-092015

Workflow of procedures in the CTCTrap program



SOP.7. Storage and Shipping Of microsieve and cartridges

This SOP.7. describes the storage of microsieves and cartridges for distribution among sites.

Cells will be removed from the cartridge for single CTC isolation and subsequent analysis. Microsieves will be stored and shipped for CTC isolation and subsequent analysis and comparison with CellSearch CTC.

Note for shipping cartridges: only the ones containing CTC are of interest and have to be shipped.

Introduction	2
1. Storage of microsieves	4
2. Storage of cartridges	4
3. Shipping of microsieves	4
4. Shipping of cartridges	5
5. Checklist SOP.7.	6

1. Storage of microsieves

Microsieves can be stored directly after scanning. It is not necessary to wait 24h for the hardening of the mounting medium.

Microsieves with cells can be stored for several months in the freezer (at least -20°C), provided that they are double sided mounted with the correct mounting medium and coverslips (**SOP.6.**). Store them inside a box to prevent icing on the coverslip itself and possible damage to the cells. Use careful labelling to be able to locate samples after a long period, also at different sites in the consortium.

After storage in the freezer, it is possible to rescan microsieves, but take into account that the fluorescence is less bright and an increased exposure time might be necessary.

2. Storage of cartridges

Directly after scanning the cartridge in the CellTracks (**SOP.3.**), remove the cartridge from the MagneSt and store this in the refrigerator (4°C) for a maximum of 4 weeks. Use careful labelling to be able to locate samples after a long period, also at different sites in the consortium. Note the CTC count and lot number of the used CTC kit on the label as well.

3. Shipping of microsieves

Microsieves can be shipped with express service (24h delivery). Place the microsieves in the provided white box, in a slide mailer for microscope slides or in a 50mL Greiner tube (see Figure 1). Use frozen coolpacks to keep the box environment as cold as possible. Label the outside of the box with the message "*Refrigerate (4°C) upon arrival*" to prevent storage at room temperature by the delivery service.



Figure 1 Shipment containers for microsieves: white box (limited available), slide mailer of Greiner tube.

Because the sample will have to be stored cold or processed directly upon arrival, it is not possible to ship a sample on a Friday, but only on Monday-Thursday.

Use the following address for your shipment:



4. Shipping of cartridges

Cartridges can be shipped with express service (24h delivery). Place the CTC positive cartridge without Magnest in a box. Use cold coolpacks to keep the box environment cold. Label the outside of the box with the message *"Refrigerate (4°C) upon arrival"* to prevent storage at room temperature by the delivery service.

Cartridges can only be stored for 4 weeks; please ship the cartridge within 2 weeks after processing to allow for sufficient processing time in Duesseldorf.

Because the sample will have to be stored cold or processed directly upon arrival, it is not possible to ship a sample on a Friday, but only on Monday-Thursday.

Use the following address for your shipment:



5. Checklist SOP.7.

Microsieve sample name	Corresponding cartridge number
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
Operator name	
Draw date	Clinical site
Prep date	Clinical site
Ship date	
From:	To:
Were microsieves stored at (at least) -20°C?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Are microsieves shipped with frozen coolpacks?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Were cartridges stored at 4°C for max 4 weeks?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Were cartridges stored outside the MagneSt?	<input type="checkbox"/> Yes <input type="checkbox"/> No

Are cartridges shipped with cold coolpacks?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Is the outside of the box labeled with a “ <i>Refrigerate upon arrival</i> ” message?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Notes:	