MiniCollect® Z Serum (Sep) Tubes
For In Vitro Diagnostic Use
Instructions for use

Intended Use
To collect, transport, separate and process capillary blood for testing serum in the clinical laboratory.

Product Description
MiniCollect® Tubes are plastic, non-evacuated, non-sterile low sample volume tubes with integrated collection devices. The closure is colour coded to identify the additives which are present in varying concentrations depending on the tube type and stated volumes. The MiniCollect® Z Serum Tubes contain a blood clotting activator that functions to initiate the clotting process. Serum tubes should be allowed to clot in an upright position for at least 30 minutes prior to centrifugation. Serum Separator Tubes contain a gel on the bottom of the tube which moves upwards during centrifugation to form a stable barrier between the clot and the serum.

<table>
<thead>
<tr>
<th>Tube Type</th>
<th>Matrix</th>
<th>Cap colour</th>
</tr>
</thead>
<tbody>
<tr>
<td>MiniCollect® Z Serum Tubes</td>
<td>Capillary blood</td>
<td>Red</td>
</tr>
<tr>
<td>MiniCollect® Z Serum Sep Tubes (with gel)</td>
<td>Capillary blood</td>
<td>Gold</td>
</tr>
</tbody>
</table>

Product versions
- MiniCollect® Tubes with optional 13x75mm carrier tubes
- MiniCollect® Tubes pre-assembled with 13x75mm carrier tubes

Storage before use
Store tubes at 4–25°C (40–77°F). Avoid exposure to direct sunlight. Exceeding the maximum recommended storage temperature may lead to impairment of the tube quality (i.e. evaporation of liquid additives, colouring, etc.). All tubes are able to withstand a freezing temperature of −20°C.

Specimen Collection and Handling
Equipment required but not provided
- Labels for positive patient identification of samples
- For testing bilirubin, MiniCollect® tubes must be used with the amber carrier tube or other protective cover.
- Gloves and appropriate apparel for protection against exposure to blood borne pathogens
- Alcohol swab
- Dry gauze
- Warming device if required, depending on the volume of blood needed and the test(s) to be performed
- Adhesive plaster or bandage
- Biohazard disposal container
- Safety lancet

Recommended Order of Draw
If multiple specimens are to be collected, including EDTA specimens, the EDTA specimen is drawn first to ensure adequate volume and accurate hematology test results. Specimens with other additives are collected next; serum specimens are collected last.

Cap Removal
The ribbed area around the tube top indicates the cap opening location. Remove the cap by applying gentle pressure on the cap in an upward direction. The triangle indicates the opposite position of the scoop.

Specimen Collection
For the collection of blood by skin puncture, please refer to the instructions for use for the lancet device used. Blood flow from the skin puncture site is increased by holding the puncture site in a downward position. The first drop of blood should be wiped away with a gauze pad if appropriate for the test method, as it is likely to contain excess tissue fluids. Apply gentle, intermittent pressure to the surrounding tissue (or proximal to the puncture site when using a finger). Strong, repetitive pressure (milking), must not be applied. It may cause hemolysis or tissue-fluid contamination of the specimen and adversely affect test results.

If appropriate for the test method, as it is likely to contain excess tissue fluids. Apply gentle, intermittent pressure to the surrounding tissue (or proximal to the puncture site when using a finger). Strong, repetitive pressure (milking), must not be applied. It may cause hemolysis or tissue-fluid contamination of the specimen and adversely affect test results.

Drops of blood should be allowed to flow freely into the tube and down the walls of the MiniCollect® Tube. If a drop becomes lodged inside the scoop or to mix the content during collection, gently tap the tube on a hard surface. Do not shake and avoid flicking the open tube. For correctly filled tubes, observe fill mark. After collection, close the tubes with the original cap, an audible click indicates correct closure. Invert until the blood completely mixes with the additive (approximately 8-10x). Vigorous shaking may cause foaming and hemolysis. The patient and the patient's blood sample must be positively identified at the time of collection. The specimen should be labelled immediately following collection and mixing.

Centrifugation
Ensure that tubes are properly seated in the centrifuge carrier. MiniCollect® tubes are recommended to be centrifuged at 3000g for a period of 10 minutes. Centrifugation should be done at a temperature of 15°C-24°C (25°C / 77°F). It is not recommended to re-centrifuge tubes once the barrier has been formed. Other centrifugation settings may also provide acceptable separation. Barriers are more stable when tubes are spun in centrifuges with horizontal swing-out rotors rather than those with fixed angle heads.
Disposal

- The general hygiene guidelines and legal regulations for the proper disposal of infectious material should be considered and followed.
- Always wear gloves during blood collection and disposal.
- Contaminated or filled blood collection tubes must be disposed of in suitable biohazard disposal containers, which can then be autoclaved and incinerated afterwards.

Sample Stability and Storage

Refer to the instrument assay instructions for use or literature for information on the correct sample material, correct storage and stability.

Precautions/Cautions

- Insufficient or delayed mixing in tubes with additives may result in delayed clotting and/or incorrect test results.
- Do not use tubes if foreign matter is present.
- Handle all biological samples and blood collection devices according to the policies and procedures of your facility.
- Obtain appropriate medical attention in the case of any exposure to biological samples.
- Check all tubes to verify appropriate product and shelf-life before use. Do not use tubes after the expiration date.
- It is the laboratory’s ultimate responsibility to verify that a change from one tube to another does not significantly affect analytical results obtained from patient samples.
- Single use only

Label Information

<table>
<thead>
<tr>
<th>REF</th>
<th>Item number</th>
<th>Temperature limit</th>
<th>Literature</th>
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