

# Streck Cell-Free DNA BCT<sup>®</sup> and Cell-Free RNA BCT<sup>®</sup> Phlebotomy Best Practices

Information in this guideline is subject to change without notice. Streck provides this guideline for qualified laboratory personnel who are trained to perform routine venipuncture using Streck Cell-Free DNA BCT and Cell-Free RNA BCT. Streck assumes no responsibility for protocols generated from this guideline.

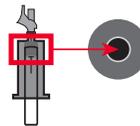
Cell-Free DNA BCT and Cell-Free RNA BCT are For Research Use Only. Not for use in diagnostic procedures in the U.S. Cell-Free DNA BCT CE and Cell-Free RNA BCT CE are For Export Only. Not for sale in the U.S.

## Phlebotomy highlights

1. Follow the CLSI Approved Standard “Procedures for the Collection of Diagnostic Blood Specimens by Venipuncture”, CLSI Document GP41-A6.<sup>1</sup>
2. Cell-Free DNA BCT and Cell-Free RNA BCT are designed to be direct draw blood collection tubes. Transferring a blood sample collected with a syringe and needle into Cell-Free DNA BCT or Cell-Free RNA BCT is not recommended due to the increased potential for hemolysis.
3. For order of draw, follow recommendations outlined in GP41-A6. Cell-Free DNA BCT and Cell-Free RNA BCT can be drawn after the EDTA tube and before the Glycolytic inhibitor tube. If a Streck tube immediately follows a heparin tube, we recommend collecting an EDTA tube as a waste tube prior to collection in Cell-Free DNA BCT or Cell-Free RNA BCT.
4. Cell-Free DNA BCT and Cell-Free RNA BCT can be drawn from a patient with a vascular access device (port). Established SOP should be followed and heparin should be avoided in pre-collection flush procedures. If therapeutic heparin contamination is a possibility, venipuncture is recommended as a first choice collection method.<sup>2</sup>
5. The following materials are required and not provided with Cell-Free DNA BCT and Cell-Free RNA BCT:
  - a. Any standard size needle holder that can accommodate a 16 mm diameter tube. Example: BD Vacutainer<sup>®</sup> Eclipse<sup>™</sup> Needles available with or without a Pre-Attached Holder (21G or 22G) or Monoject<sup>™</sup> Blood Collection Needles and Tube Holders (21G or 22G).

Note: Slower fill times may be observed when using a smaller needle.

  - b. For the 2.0 mL Cell-Free DNA BCT, care must be taken to center the tube so the middle of the stopper is punctured per the figure below. To aid with proper insertion of the tube in standard holders and stabilize the tube during the draw, a pediatric tube adapter is strongly recommended to modify the standard holder to fit the 10.25 mm diameter 2.0 mL Cell-Free DNA BCT (Streck part number: 230242, 230243, 230250, 230251).

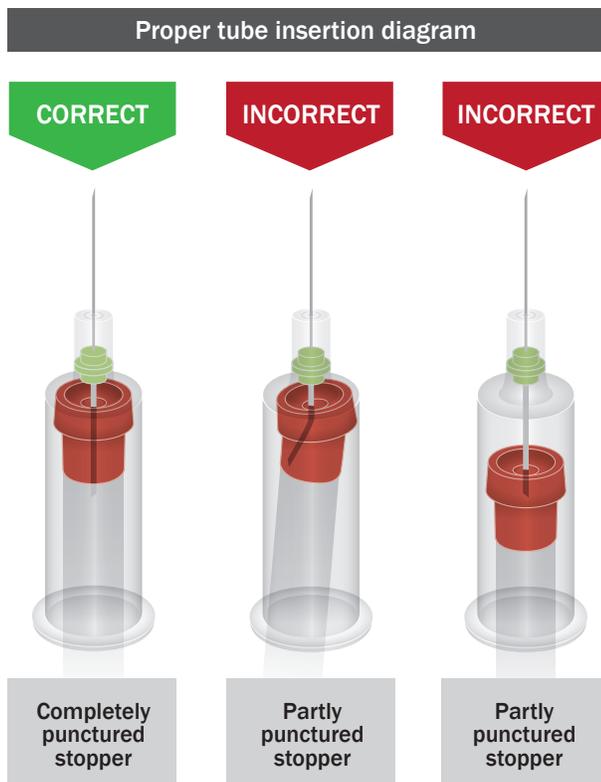


- When using a winged (butterfly) collection set for venipuncture and the Cell-Free DNA BCT or Cell-Free RNA BCT is the first tube drawn, a non-additive or EDTA discard tube should be partially drawn first in order to eliminate air or “dead space” from tubing.
- Prevention of Backflow — as with all blood collection tubes that contain chemical additives, position the patient’s arm in the downward position during the collection procedure to prevent reflux or “backflow” from the collection tube into the vein.
- Insert the Cell-Free DNA BCT or Cell-Free RNA BCT into the plastic holder and hold the tube so the cap is flush against the needle holder as the sample is being collected.

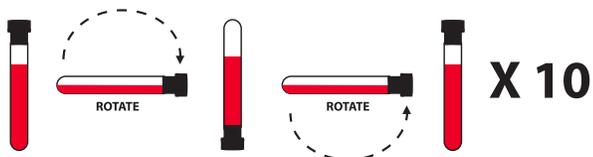
- Visit [www.streck.com/mixing](http://www.streck.com/mixing) for a video demonstration.
- Refer to the Cell-Free DNA BCT and Cell-Free RNA BCT Instructions For Use (IFU) for recommended storage temperatures, stability information and additional information regarding the blood collection tubes.

**Tube Configurations:**

Product	Draw Volume	Kit Configurations	Catalog Number
Cell-Free DNA BCT	10 mL	6 tubes	218961
		100 tubes	218962
		1000 tubes	218992
	2 mL	6 tubes	230242
100 tubes		230243	
Cell-Free DNA BCT CE	10 mL	6 tubes	218996
		100 tubes	218997
		1000 tubes	230244
	2 mL	6 tubes	230250
		100 tubes	230251
Cell-Free RNA BCT	10 mL	6 tubes	218975
		100 tubes	218976
Cell-Free RNA BCT CE	10 mL	6 tubes	230248
		100 tubes	230249



- Allow the tube to fill until the vacuum is exhausted and blood flow ceases.
- It is critical to mix tubes thoroughly by inverting the tube 8-10 times end-over-end immediately after collection. One inversion is a complete turn of the wrist, 180 degrees and back.



**References**

- CLSI GP41-A6, Procedures for the collection of diagnostic blood specimens by venipuncture. Approved Standard - Sixth edition.
- Yokota M., Tasumi N., et al. Effects of heparin on polymerase chain reactions for blood white cells. Journal of Clinical Laboratory Analysis 1999;13:133-40.