

Circulating Cell Free Tumor DNA (ctDNA) UHN Streck Tube Sample Collection/Shipping Guidelines

1. BLOOD COLLECTION IN STRECK CELL-FREE DNA BCT TUBES:

1.1 COLLECTION TUBES: STRECK CELL-FREE DNA BLOOD COLLECTION TUBES (BCT):

Ordering information: Streck Cell-Free DNA BCT

Distributed by Inter-Medico in Canada:

#SL-218996 (6 pack – 10ml tubes)

#SL-218997 (100 pack – 10 ml tubes)

Storage: Empty tubes should be stored at room temperature until the listed expiration date

Note: Streck has discontinued plastic tubes (information above is for glass tubes)

1.2 BLOOD COLLECTION INSTRUCTION FOR STRECK TUBES:

Note that 2 full Streck 10 ml tubes (approximately 18-20 ml blood) will be needed from each patient. If the tubes are not filled to the maximum, additional tubes may be needed.

Blood must be collected by venipuncture in Streck Cell-Free DNA BCT tubes according to the manufacturer's instructions.

See Streck Cell-Free BCT Phlebotomy Best Practices at:

[https://www.streck.com/wp-content/uploads/sync/Collection/Collection_Tubes/Cell-Free_DNA_BCT/01_Instructions_\(IFU\)/04_Streck_Cell-Free_DNA%20BCT_and_Cell-Free_RNA_BCT_Phlebotomy_Best_Practices.pdf](https://www.streck.com/wp-content/uploads/sync/Collection/Collection_Tubes/Cell-Free_DNA_BCT/01_Instructions_(IFU)/04_Streck_Cell-Free_DNA%20BCT_and_Cell-Free_RNA_BCT_Phlebotomy_Best_Practices.pdf)

Blood draw order:

- Cell-Free DNA blood collection tubes should be drawn after EDTA tubes and before fluoride oxalate (glycolytic inhibitor) tubes
- If a Cell-Free DNA blood collection tube immediately follows a heparin tube in the draw order, it is recommended to collect a non-additive or EDTA tube as a waste tube prior to collection in the Cell-Free DNA blood collection tubes

Tube mixing:

- It is critical to mix tubes thoroughly by gentle inversion 8 to 10 times. Inadequate or delayed mixing may result in incorrect analytical results or poor product performance. One inversion is a complete turn of the wrist, 180 degrees, and back.

Storage temperature after collection/during shipping:

- Streck tubes must be kept at a temperature between 10°C and 30°C once blood is collected and during shipping

2. SENDING STRECK CELL-FREE DNA BCT TUBE SAMPLES TO GENOME DIAGNOSTICS, UHN, TORONTO:

Sample volume:

- For each patient, at least 18-20 ml blood in Streck tubes (i.e. 2 full Streck Cell-free DNA BCT tubes, or additional tubes if they are not filled to the maximum) must be sent to UHN Genome Diagnostics

Requisition:

- Complete the UHN Genome Diagnostics current clinical requisition form, available at : https://www.uhn.ca/LMP/Health_Professionals/Documents/CytogeneticsandMolecularDiagnosticstests.pdf

Shipping:

Samples should be appropriately labelled and shipped according to these instructions:

- **The tubes must be shipped to reach the laboratory within a maximum of 5 days from the date of blood draw**
- Each Streck tube must be labelled with patient's name, date of birth and MRN#
- Complete the UHN Genome Diagnostics clinical requisition form
- Place the 2 Streck tubes in an appropriate protective package (for example : VWR #73320-137 <https://ca.vwr.com/store/product/en/4677875/diagnostic-shippers-and-kpa-bags-for-specimen-transport-sonoco-thermosafe>)
- Insert the tubes in a biohazard plastic bag with absorbent to prevent blood spilling in case of damage
- Place the biohazard bag, and completed requisition, into an appropriate outer container for shipping and label the outer container with a biohazard label
- Send to the following address using appropriate methods (FedEx, courier or similar):

**Genome Diagnostics, Department of Clinical Laboratory Genetics
Toronto General Hospital
Eaton Wing 11th floor, Room 11-444
200 Elizabeth Street
Toronto, Ontario, M5G 2C4
(416) 340-4800 x5739/7624**