

**Biomnis** 

## Protocol Sampling procedure for PAXgene blood RNA tubes

## EXPLANATION

- The PAXgene™ Blood RNA tube contains an additive that stabilises the in vivo gene transcription by reducing the in vivo RNA degradation and minimising gene induction.
- The PAXgene™ Blood RNA kit was designed for intracellular RNA purification of human whole blood with a leucocyte count of less than 11G/L.
- Unused PAXgene™ Blood RNA tubes must be stored at ambient temperature.
- Insufficient filling of these PAXgene<sup>™</sup> Blood RNA tubes can lead to incorrect blood/additive ratio which can skew test results or undermine product performance. Sampling procedure for this tube must be followed thoroughly.

**BLOOD SAMPLING PROCEDURE** 

- Ensure that the PAXgene<sup>™</sup> Blood RNA tube is at a temperature of 18-25°C and that the tube is correctly labelled with the patient's details before use.
- If only the PAXgene<sup>™</sup> Blood RNA tube is to be used, bleed the patient by collecting a preliminary tube before filling the PAX<sup>™</sup> Blood RNA tube. This improves the internal volume inside the blood sample collection device used in phlebotomy.



## **Required tubes for sample collection:**

Tube A - Bleeding tube

Tube B - PAXgene™ Blood RNA tube

- Using a blood sample collection device and a needle holder, draw the blood into the PAXgene™ Blood RNA by following the local recommended standard blood collection protocol for venous pucture. The techniques below should be followed to reduce the risk of reflux :
  - > Position the patient's arm in a downwards position
  - > During sample collection keep the tube in a vertical position below the patient's arm
  - > Release the tourniquet as soon as the blood starts to flow into the tube
  - > Ensure that the additive does not touch the lid or the end of needle during sample collection
- Once the sample has been collected, gently inverse the PAXgene™ Blood RNA tube 8-10 times.
- Keep the PAXgene<sup>™</sup> Blood RNA tube vertical and at ambient temperature (18-25°C) for at least 2 hours before freezing the sample (-20°C).

## SAMPLE FREEZING PROCEDURE

Place the sample vertically in a metal rack. Do not freeze the sample vertically in a polystyrene rack as the tubes could break.

The PAXgene<sup>™</sup> Blood RNA can break if it receives a blow. To reduce the risk of breakage during transportation, the frozen tubes should be treated as if they were glass tubes.