



**PAXgene<sup>®</sup>**  
*Blood DNA Tube*

**For Research Use Only**

Not for use in diagnostic procedures

To be used only in conjunction with the  
PAXgene Blood DNA Kit (Cat. No. 761133)

## I. Introduction

The PAXgene Blood DNA Tube is a plastic, evacuated tube for the collection of whole blood and the subsequent isolation of genomic DNA. The tube contains an additive which anti-coagulates the blood and preserves genomic DNA. The PAXgene Blood DNA Tube is intended for use with the PAXgene Blood DNA Kit (Cat. No. 761133).

For Research Use Only. Not For Use In Diagnostic Procedures. The performance characteristics of this product have not been fully established. Its suggested use is for molecular test methods that require intact genomic DNA from whole blood. These test methods include, but are not limited to, PCR (polymerase chain reaction) based methods and Southern blot analysis.

## Product Features

PAXgene Blood DNA Tube	8.5 ml • 16 x 100 mm	2.0 ml K <sub>3</sub> EDTA additive	Sterile
BD Vacutainer® Plus plastic tube	BD Hemogard™ closure	100 tubes/case	761115

## II. Summary and Explanation

Research applications, including pharmacogenomic studies, gene sequencing, and SNP genotyping, yield important data. Therefore, the use of standardized methods for sample collection and nucleic acid isolation are of increasing importance. The PAXgene Blood DNA System, which is comprised of the PAXgene Blood DNA Tube and the PAXgene Blood DNA Kit, provides an efficient method for standardized blood collection, transport, and storage of whole blood specimens and isolation of genomic DNA. Purified DNA obtained using the PAXgene Blood DNA System performs well in a wide variety of downstream applications.

## III. Principle of Procedure

The PAXgene Blood DNA Tube provides a means for the collection of 8.5 ml of whole blood in a closed, evacuated system. Blood is collected using standard venipuncture technique into an evacuated tube that contains 2.0 ml of DNA stabilization additive for a ratio of 0.24 ml of additive per ml of blood when the evacuated tube is filled correctly. Isolation of genomic DNA from the entire specimen is carried out using the PAXgene Blood DNA Kit (Cat. No. 761133).

## IV. Specimen Collection and Preparation for Analysis

### A. Required Blood Collection Accessories (not included with PAXgene System)

1. Blood collection devices such as the BD Vacutainer Blood Collection Needle or BD Vacutainer Blood Collection Set (see Section XII Ordering Information).
2. A BD Vacutainer Tube Holder must be used to ensure proper function (see Section XII Ordering Information).
3. Labels for specimen identification, if required.
4. Alcohol swab for cleansing site.
5. Dry sterile gauze.

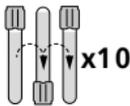
- Tourniquet.
- Biohazard container for used needle or needle/holder combination.

#### B. Procedure for Specimen Collection

- Ensure that the PAXgene Blood DNA Tube is at room temperature (18–25°C) prior to use and properly labeled with specimen identification.



- Collect blood into the PAXgene Blood DNA Tube using your institution's recommended procedure for standard venipuncture technique (see Section V Prevention of Backflow).
- Ensure that the blood has stopped flowing into the tube before removing the tube from the holder.



- After blood collection, gently invert the PAXgene Blood DNA Tube 8–10 times.
- Store the PAXgene Blood DNA Tube upright at room temperature (18–25°C) up to 14 days, refrigerated (2–8°C) up to 28 days, or frozen at –20°C or –70°C.

#### C. Guidelines for Freezing PAXgene Blood DNA Tubes Containing Blood Samples

- To freeze PAXgene Blood DNA Tubes, stand them upright in a metal or plastic wire rack. **Do not freeze tubes upright in a Styrofoam™ tray as this may cause the tubes to crack.**
- If tubes are to be stored for less than 10 weeks, freeze the tubes in the wire rack at –20°C. For longer storage periods, freeze the tubes first at –20°C for 24 hours, and then transfer them to –70°C or –80°C.
- To thaw PAXgene Blood DNA Tubes, place them in a wire rack in a water bath at 37°C for 15 minutes. After thawing, carefully invert the tubes 10 times.

Note: Frozen PAXgene Blood DNA Tubes are subject to breakage upon impact. To reduce the risk of breakage during shipment, frozen tubes should be treated in the same manner as glass tubes. Users must validate their own freezing and shipping protocol for PAXgene Blood DNA Tubes.

#### D. Procedure for Specimen Preparation for Analysis

Blood samples should be processed in accordance with the instructions provided with the PAXgene Blood DNA Kit (Cat. No. 761133).

#### V. Prevention of Backflow

Since PAXgene Blood DNA Tubes contain a liquid additive, it is important to avoid possible backflow from the tube, with the possibility of adverse subject reactions. To guard against backflow, observe the following precautions:

- Place subject's arm in a downward position.

2. Hold tube with the stopper uppermost.
3. Release tourniquet as soon as blood starts to flow into tube.
4. Make sure the tube additive does not touch stopper or non-patient end of the needle during venipuncture.

## **VI. Limitations of System**

1. This tube is for research use only. Neither the clinical utility nor the performance characteristics of the PAXgene Blood DNA Tube and Kit as part of an in vitro diagnostic procedure have been established.
2. The quantity of blood drawn varies with altitude, ambient temperature, barometric pressure, tube age, venous pressure, and filling technique.
3. Blood samples obtained with the PAXgene Blood DNA Tube should be prepared only with the PAXgene Blood DNA Kit (Cat. No. 761133).
4. Endotoxin not controlled. Blood and blood components collected and processed in the tube are not intended for infusion or introduction into the human body.

## **VII. Warnings and Precautions**

1. Contents of this tube may cause irritation to eyes, digestive system and skin.
  - After skin contact, wash skin with soap and water. Get medical attention if irritation persists after washing.
  - After eye contact, if irritation occurs, get medical assistance.
  - After swallowing, rinse mouth. Get medical attention if any discomfort occurs.
2. Practice Universal Precautions. Use gloves, gowns, eye protection, other personal protective equipment, and engineering controls to protect from blood splatter, blood leakage, and potential exposure to blood borne pathogens.
3. Handle all blood samples and blood collection devices (needles, luer adapters, and blood collection sets) according to the policies and procedures of your facility. Obtain appropriate medical attention in the event of any blood exposure (for example, through a needlestick injury), since there is a risk of transmission of viral hepatitis, HIV, or other infectious diseases. Utilize any built-in needle protector after blood collection if the blood collection device provides one. PreAnalytiX does not recommend re-shielding used needles; however, the policies and procedures of your facility may differ and must always be followed.
4. Discard all blood collection tubes and accessories in biohazard containers approved for their disposal.
5. Do not re-use PAXgene Blood DNA Tubes.
6. Do not use PAXgene Blood DNA Tubes after expiration date printed on tube label.
7. Since this PAXgene Blood DNA Tube contains a chemical additive, precautions should be taken to prevent possible backflow from the tube during blood drawing (see Section V Prevention of Backflow).

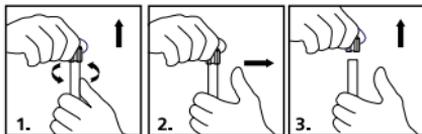
8. Transferring a blood sample collected with a syringe and needle into the PAXgene Blood DNA Tube is not recommended due to the increased potential for needlestick injury and creating incorrect blood to additive ratio.

## VIII. Storage

Store the empty PAXgene Blood DNA Tubes at room temperature (18–25°C). Do not use tubes after their expiration date.

## IX. Instructions for Removal of BD Hemogard Closure

1. Grasp the PAXgene Blood DNA Tube with one hand, placing the thumb



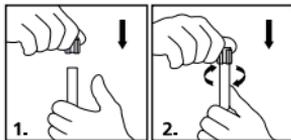
under the BD Hemogard closure (for added stability, place arm on solid surface). With the other hand, twist the BD Hemogard closure while simultaneously pushing

up with the thumb of the other hand **ONLY UNTIL THE TUBE STOPPER IS LOOSENED.**

2. Move thumb away before lifting closure. **DO NOT** use thumb to push closure off tube. Caution: If the tube contains blood, an exposure hazard exists. To help prevent injury during closure removal, it is important that the thumb used to push upward on the closure is removed from contact with the tube as soon as the BD Hemogard closure is loosened.
3. Lift closure off tube. In the unlikely event of the plastic shield separating from the rubber stopper, **DO NOT REASSEMBLE CLOSURE.** Carefully remove rubber stopper from tube.

## X. Instructions for Reinsertion of BD Hemogard Closure

1. Replace closure over tube.
2. Twist and push down firmly until stopper is fully resealed. Complete reinsertion of the stopper is necessary for the closure to remain securely on the tube during handling.



## XI. Technical Assistance

If you have any questions regarding the PAXgene Blood DNA System, contact one of the QIAGEN Technical Services Departments listed on QIAGEN – Customer Service section.

## XII. Ordering Information

### PAXgene Products

#### **PAXgene Blood DNA Tube / 761115**

Content: 100 blood collection tubes.  
Use with the PAXgene Blood DNA Kit (25).

#### **PAXgene Blood DNA Kit (25) / 761133**

Content: 25 Processing Tubes containing 25 ml Buffer BG1 (lysis buffer), Buffer BG2 (wash buffer), Buffer BG3 (digestion buffer), Buffer BG4 (resuspension buffer) and PreAnalytiX Protease.  
Use with the PAXgene Blood DNA Tube.

### BD Products\*

#### **BD Vacutainer UltraTouch™ Push Button Blood Collection Set / 367365**

Content: 21G 3/4 inch (0.8 × 19 mm) needle, 12 inch (305 mm) tubing with luer adapter. 50/box, 200/case

#### **BD Vacutainer Safety-Lok™ Blood Collection Set / 367281 US / 367286 CE**

Content: 21G 3/4 inch (0.8 × 19 mm) needle, 12 inch (305 mm) tubing with luer adapter. 50/box, 200/case

#### **BD Vacutainer Eclipse™ Blood Collection Needle / 368609 CE**

Content: 21G 1¼ inch (0.8 × 32 mm) needle. 48/box, 480/case

#### **BD Vacutainer Eclipse Blood Collection Needle with Pre-Attached Holder / 368650**

Content: 21G 1¼ inch (0.8 × 32 mm) needle. 100/case

#### **BD Vacutainer Eclipse Signal™ Blood Collection Needle / 368835 CE**

Content: 21G 1¼ inch (0.8 × 32 mm) needle. 50/box, 400/case

#### **BD Vacutainer One Use Holder / 364815**

Content: Case only for 13 mm and 16 mm diameter. 1000/case

\*These catalog numbers represent typical products that can be used with the PAXgene Blood DNA Tube.

### To order BD Blood Collection Accessories:

Go to: <http://www.bd.com/support/contact/international.asp>

• Select country • Scroll down for BD Diagnostics - Preanalytical Systems • Dial number

## QIAGEN – Customer Service

### Australia

Orders: 1.800.243.800  
Technical: 1.800.243.066  
Fax: 03.9840.9888

### Austria

Orders: 0800.28.10.10  
Technical: 0800.28.10.11  
Fax: 0800.28.10.19

### Belgium

Orders: 0800.79612  
Technical: 0800.79556  
Fax: 0800.79611

### Brazil

Orders: 0800.557779  
Technical: 0800.557779  
Fax: 55.11.5079.4001

### Canada

Orders: 800.572.9613  
Technical: 800.DNA.PREP (800.362.7737)  
Fax: 800.713.5951

### China

Orders: 86.21.3865.3865  
Technical: 800.988.0325  
Fax: 86.21.3865.3965

### Denmark

Orders: 80.885945  
Technical: 80.885942  
Fax: 80.885944

### Finland

Orders: 0800.914416  
Technical: 0800.914413  
Fax: 0800.914415

### France

Orders: 01.60.920.926  
Technical: 01.60.920.930  
Fax: 01.60.920.925

### Germany

Orders: 02103.29.12000  
Technical: 02103.29.12400  
Fax: 02103.29.22000

### Hong Kong

Orders: 800.933.965  
Technical: 800.930.425  
Fax: 800.930.439

### Ireland

Orders: 1800.555.049  
Technical: 1800.555.061  
Fax: 1800.555.048

### Italy

Orders: 800.789.544  
Technical: 800.787.980  
Fax: 02.334304.826

### Japan

Orders: 03.6890.7300  
Technical: 03.6890.7300  
Fax: 03.5547.0818

### Korea (South)

Orders: 080.000.7146  
Technical: 080.000.7145  
Fax: 02.2626.5703

### Luxembourg

Orders: 8002.2076  
Technical: 8002.2067  
Fax: 8002.2073

### Mexico

Orders: 01.800.7742.639  
Technical: 01.800.7742.436  
Fax: 01.800.1122.330

### The Netherlands

Orders: 0800.0229592  
Technical: 0800.0229602  
Fax: 0800.0229593

### Norway

Orders: 800.18859  
Technical: 800.18712  
Fax: 800.18817

### Singapore

Orders: 1800.742.4362  
Technical: 1800.742.4368  
Fax: 65.6854.8184

**Spain**

Orders: 91.630.7050  
Technical: 91.630.7050  
Fax: 91.630.5145

**Sweden**

Orders: 020.790282  
Technical: 020.798328  
Fax: 020.790582

**Switzerland**

Orders: 055.254.22.11  
Technical: 055.254.22.12  
Fax: 055.254.22.13

**UK**

Orders: 01293.422.911  
Technical: 01293.422.999  
Fax: 01293.422.922

**USA**

Orders: 800.426.8157  
Technical: 800.DNA.PREP (800.362.7737)  
Fax: 800.718.2056

**BD - Customer Service****Argentina, Uruguay and Paraguay**

Orders: 0800.444.5523  
E-mail: crc\_argentina@bd.com

**Australia**

Orders: 1.800.656.100  
Fax: 1.800.656.110  
E-mail: bd\_anz@bd.com

**Austria**

Orders: 43.1.706.36.60  
Fax: 43.1.706.36.60-11  
Email: customerservice.vac.ga@europe.bd.com

**Belgium**

Orders: 32.53.720.556  
Fax: 32.53.720.549  
Orders: orders.be@europe.bd.com

**Brazil**

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E-mail: consultoria\_vacutainer@bd.com

**Canada**

Orders: 800.268.5430  
Fax: 800.565.0897  
E-mail: custsvccan@bd.com

**Central and Eastern Europe (CEE)**

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Croatia: info\_croatia@europe.bd.com  
Hungary: info\_hungary@europe.bd.com  
Poland: info\_poland@europe.bd.com  
Romania: info\_romania@europe.bd.com  
SEE: info\_balkan@europe.bd.com  
Serbia: info\_serbia@europe.bd.com  
Slovakia: info\_slovakia@europe.bd.com  
Slovenia: info\_slovenia@europe.bd.com  
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**Denmark**

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Orders: ordre.dk@europe.bd.com  
Technical: bddenmark@europe.bd.com

**Finland**

Orders: 358.9.88.70.780  
Fax: 358.9.88.70.7816  
Orders: tilaukset.fi@europe.bd.com  
Technical: bdsuomi@europe.bd.com

**France**

Orders: 33.476.68.94.96  
Fax: 33.476.68.36.93  
Orders: commandesfr@europe.bd.com  
E-mail: serviceclientbdf@europe.bd.com  
Technical: vacutainerfr@bd.com

**Germany**

Orders: 49.6221.305.553  
Fax: 49.6221.305.379  
Email: customerservice.vac.ga@europe.bd.com

**Italy**

Orders: 39.02.48.240.500  
Technical: 39.335.424.388  
Fax: 39.02.40.91.80.11  
E-mail: ordini.it@europe.bd.com

**Middle East & Africa (EMA)**

Orders: 971.4.3379525  
Fax: 971.4.03379551  
E-mail: EMA\_PAS@bd.com

**The Netherlands**

Orders: 31.20.582.94.20  
Fax: 31.20.582.94.21  
Orders: orders.nl@europe.bd.com

**New Zealand**

Orders: 0800.572.468  
Fax: 0800.572.469  
E-mail: nz\_customerservice@bd.com

**Norway (Puls Handicare)**

Orders: 47.23.32.30.00  
Fax: 47.23.32.30.99  
E-mail: kundeservice@puls-norge.no

**Spain, Portugal and Andorra**

Orders: 34.91.848.8104  
Technical: 34.902.27.17.27  
Fax: 34.91.828.81.48  
E-mail: info.spain@europe.bd.com

**Sweden**

Orders: 46.8.775.51.60  
Fax: 46.8.775.51.95  
Orders: order.se@europe.bd.com  
Technical: bds sweden@europe.bd.com

**Switzerland**

Orders: 41.61.485.22.22  
Fax: 41.61.485.22.00  
E-mail: infoch@europe.bd.com

**UK**

Orders: 44.1.865.781.666  
Fax: 44.1.865.717.313  
E-mail: bduk\_customerservice@europe.bd.com

**USA**

Orders: 888.237.2762  
Technical: 800.631.0174  
Fax: 800.847.2220  
Technical: www.bd.com/vacutainer/contact

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