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A Geno Technology, Inc. (USA) brand name

RBC Lysis Buffer

**For the Optimal Lysis of Erythrocytes for
DNA & RNA Isolation from Lymphocytes**

(Cat. # 786-649, 786-650, 786-672, 786-849)



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INTRODUCTION

Our RBC Lysis Buffer is designed for the optimal lysis of erythrocytes, while having minimal effect of leukocytes, including lymphocytes, when used as directed. The use of RBC Lysis Buffer allows for the preferential lysis of red blood cells from whole blood and as these are the majority of cells in whole blood permits the concentration of the nucleated white blood cells. This buffer is ideal for the isolation of DNA and RNA from blood. Using RBC Lysis Buffer eliminates the need for toxic organic solvents or chaotropes. Our RBC Lysis buffer is used in our *X/IT*[™] DNA from Whole Blood kits.

ITEM(S) SUPPLIED

Description	Cat. # 786-	Cat. # 786-	Cat. # 786-	Cat. # 786-
RBC Lysis Buffer	100ml	250ml	500ml	1L

STORAGE CONDITIONS

The kit is shipped at ambient temperature; upon arrival, store at 4°C. The product is stable for up to one year, if stored/used properly.

PREPARATION BEFORE USE

1. Warm the buffer to room temperature.
2. Warm blood sample to room temperature.

NOTE: The blood sample must be <1 month old and been stored in anti coagulants (i.e. EDTA, heparin, and citrate). For RNA isolation, use only fresh (<3 days old) blood for optimal DNA isolation.

PROTOCOL FOR 0.5ML BLOOD

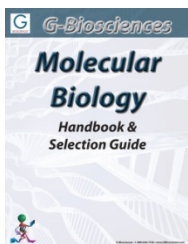
1. Add 0.5ml whole blood to a 1.5ml tube containing 1ml RBC Lysis Buffer. Invert the tube to mix and incubate for 5 minutes at room temperature on a shaking platform or with periodic inversions. **Do not vortex.**
2. Centrifuge 2,500xg for 5 minutes then remove supernatant carefully without disturbing the pellet. If pellet is not white, repeat steps 1 and 2 with a further 1ml RBC Lysis Buffer.
3. If a lower red pellet is still visible below the white pellet then repeat steps 1 and 2 with fresh blood with the following modifications:
 - a. Ensure the RBC Lysis Buffer is at room temperature.
 - b. Increase the incubation to 15 minutes
 - c. Use a higher ratio of RBC Lysis Buffer to blood (3:1).

PROTOCOL FOR SMALLER BLOOD VOLUMES

Blood Volume (μ l)	RBC Lysis Buffer Volume (in steps 1 and 2) (μ l)
400-500	1000
300-400	800
200-300	600
100-200	400
1-100	200

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