

REF	90262020		
Pack Size	20 ml		

# **Red Cell Preserving Solution**

+ 2°C	Manufacturer	IVD  In vitro Diagnostic Medical Device	Batch Number / Lot Number	Expiry date	RPS
Consult Instructions for use	Date of Manufacture	REF Catalogue Number	This side up	Keep Away from Sunlight	SBIOCAT <sup>™</sup> Red Cell Preserving Solution

#### SUMMARY

In blood group serology, known red cell panels are of immense value in confirming the results of forward grouping, antibody screening and detection of rare phenotypes. A red cell preserving solution is utilized to preserve the red cells of interest. SBIOCAT™ Red Cell Preservation Solution is formulated specifically for enhanced preservation of red cells carrying clinically important phenotype or genotype, which are required for routine immunohaematological practice.

#### REAGENTS

SBIOCAT™ Red Cell Preserving Solution is a standardized Alsever's solution for maintaining red cell integrity and survival.

# STORAGE AND STABILITY

Store the reagent at 2-8  $^{\circ}$ C. Stability of unopened vial : 24 months from the date of manufacturing.

# **PRINCIPLE**

Red blood cell shrinkage and loss of antigenic properties are observed on storage. To preserve the red cells for a longer time and ensure enhanced usage life for serological procedures the SBIOCAT™ Red Cell Preserving Solution supplies the necessary nutrients, salts and preservatives for maintaining red cell integrity and antigenic properties useful during serological procedures.

# NOTE

- 1. In vitro diagnostic reagent. Not for medicinal use.
- Extreme turbidity may indicate microbial contamination. Such reagents must be discarded.

# ADDITIONAL MATERIAL REQUIRED

- Freshly collected red blood cells in EDTA di-potassium salt (1.5 mg/ml of whole blood).
- 2. Test tubes 12 x 75 mm, scrupulously clean and dry.
- 3. 10 ml pipettes, scrupulously clean and dry.
- 4. 500 µl micropipette and micropipette tips.
- 5. Freshly prepared normal saline (0.9% NaCl)
- 6. Table centrifuge.
- 7. Sterile 10 ml vials.

### **TEST PROCEDURE**

- a) Quick method for whole blood preservation
- Collect 5 ml whole blood in EDTA di-potassium salt (1.5 mg/ml of whole blood). Add equal volume of SBIOCAT™
  Red Cell Preserving Solution to it. Gently mix the solution.
- Before using the red cells prepared by the Quick method, it is recommended to wash the red cells three times with normal saline before use for testing purpose.
- b) Preparation of 2/3/5% stabilized Red Blood cell suspension in SBIOCAT™ Red Cell Preserving Solution
- Collect 2 ml of freshly drawn venous blood in a clean and dry test tube containing 3 mg of EDTA di-potassium salt.
- 2. Add 5 ml of normal saline solution and mix well.
- Centrifuge the tube at 3000 r.p.m. for 2-3 minutes to form a red cell button.
- 4. Discard the supernatant.
- 5. Resuspend the red cell button in normal saline solution
- 6. Centrifuge the tube at 3000 r.p.m. for 2-3 minutes.
- Repeat the washing of the red cells (step 4 & 5) one more time in normal saline.
- 8. After centrifugation, remove the supernatant without disturbing the red cell button.
- Now resuspend the red cell button in 5 ml of SBIOCAT™ Red Cell Preserving Solution.
- 10. Centrifuge the tube at 3000 r.p.m. for 2-3 minutes.
- 11. After the centrifugation, remove the supernatant without disturbing the red cell button.
- 12. Take 0.2/0.3 ml of packed red cells from the above cell button and resuspend them in 10 ml of SBIOCAT™ Red Cell Preserving Solution for preparation of 2/3% red cell suspension. To obtain a 5% red cell suspension resuspend 0.5 ml of packed red cells from the above cell button in 10 ml of SBIOCAT™ Red Cell Preserving Solution.
- 13. Store the red cell suspension in a sterile 10 ml vial.
- The red cell suspension so obtained is ready to use for testing.

# **STORAGE**

- 1. The whole blood preserved in SBIOCAT™ Red Cell Preserving Solution prepared by the Quick method can be
- stored upto 4 weeks at 2-8°C.

  The ready to use 2/3/5 % stabilized red blood cell suspension in SBIOCAT™ Red Cell Preserving Solution should be stored at 2-8°C and can be utilized or 6 weeks from the date of preparation

# **PRECAUTIONS**

- 1. Store SBIOCAT™ Red Cell Preserving Solution at 2-8°C with cap tightly closed.
- 2. Do not contaminate the solution as it may subsequently effect the stability of red cell suspension.
- Glassware used to retrieve the SBIOCAT ™ Red Cell suspension should be scrupulously clean and sterile.

# WARRANTY

This product is designed to perform as described on the label and package insert. The manufacturer disclaims any implied warranty for use and sale for any other purpose.

# **BIBLIOGRAPHY**

- Practical Haematology, Sir John V. Dacie, S. M. Lewis, 8th Ed., 1995, Churchill Livingstone Publications.
   AABB Technical Manual, 13th Ed., 1999.
- 3. Blood Grouping Reagents Preparation and application methods, WHO Regional Publications, Eastern Mediterranean Series - 5, 1993.
- Blood Transfusion in Clinical Medicine, P. L. Mollison, C. P. Engelfreit, Marcela Conteras, 9th Ed., 1993, Blackwell Scientific Publications.
- 4. Data on file: Singapore Biosciences PTE Ltd.



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