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| **University of Washington,** **Harborview Medical Center****325 9th Ave. Seattle, WA, 98104****Transfusion Services Laboratory****Policies and Procedures Manual** | **Original Effective Date:**April 1st, 2011 | **Number:** 5501-4 |
| **Revision Effective Date:**7/7/2020 | **Pages:** 2 |
| TITLE: TANGO infinity: Bromelin and Rinsing Solution (NaOH) Preparation |

**Purpose:**

To ensure that the Bromelin and Rinsing solution used on the TANGO infinity® are prepared correctly.

**Procedure:**

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| **Step** | **Action** | **Related Documents**  |
| **General Statements: Bromelin** |
| 1 | Bromelin is used as a diluent for red cells that are to be typed on the TANGO. The product is supplied in a liquid concentrate and requires a 1/20 dilution on each day of use. |  |
| 2 | The operator is responsible for preparing the reagent |  |
| 3 | Required Materials are:* 50 mL clean dry vial(s)
* Bromelin barcode labels
* Unbuffered NaCl (0.9%)
* Bromelin concentrate
* Graduated cylinder
 |  |
| 4 | Precautions:* Bromelin concentrate is stored at 2-8 oC
* Do not use buffered saline to prepare the Bromelin dilution.
* Prepared working reagent is good for 24 hours.
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| **General Statements: Rinsing Solution (NaOH)** |
| 1 | A rinsing solution of 0.5 N sodium hydroxide (NaOH) is used to reduce the amount of pipette carryover between samples. The product is supplied as a room temperature liquid that is transferred into a 50 mL vial for use. |  |
| 2 | Required Materials are:* 50 mL clean dry vial(s)
* Rinsing Solution barcode labels
* 0.5 N sodium hydroxide (NaOH)
* Graduated cylinder
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| **Step** | **Action** | **Related Documents**  |
| 3 | Precautions:* Rinsing Solution is stored at room temperature.
* NaOH is corrosive! Wear appropriate PPE when handling reagent.
* Rinsing Solution is good for 48 hours on TANGO infinity.
* Fill each vial with a minimum of 20 mL and no more than 50 mL of Rinsing Solution.
* Rinsing solution must be placed into a room temperature reagent rack in position 1 or 2 and then loaded into Lane 1 of the room temperature section on the TANGO Infinity.
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| **Preparation of the Diluted Bromelin (working solution).** |
| 1 | Apply one of the supplied barcode labels on a clean, dry 50 mL vial |  |
| 2 | Dispense 1 part Bromelin concentrate into the vial. | Table A: Examples of Bromelin Volume Preparation |
| 3 | Dispense 19 parts unbuffered NaCl (0.9%) into the vial. |  |
| 4 | Swirl to mix Bromelin and saline or use the cap from the Bromelin vial, screw it on the 50 mL vial and invert.* If the cap is used, remove prior to placement on the TANGO.
* Avoid foam formation.
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| 5 | The working solution has a 24-hour expiration. Label the working solution with the preparation date/time, expiration date/time, and tech ID.* The 100% default on the TANGO assumes a 50 mL fill volume in a 50 mL reagent bottle.
* If more than 50 mL will be needed in a 24 hour period, prepare adequate amount of reagent and aliquot between two (2) or more bottles.
* The TANGO can accept more than one bottle of the same reagent.
* Document date/time made, date/time expiring, and remaining onboard hours on the TANGO infinity Daily Reagents in Use Form.

Preparing one batch and aliquoting the reagent into multiples bottles will eliminate the need to perform additional QC.  | TANGO infinity: Daily Reagents in Use Form |
| **Preparation of Rinsing Solution (NaOH)** |
| 1 | Apply one of the supplied barcode labels on a clean, dry 50 mL vial |  |
| 2 | Aliquot out 20-50 mL of 0.5 N NaOH and place into 50 mL vial |  |
| 3 | Aliquot of Rinsing Solution has a 48-hour onboard expiration. Label the prepared Rinsing Solution with the preparation date/time, expiration date/time, and tech ID.* Document date/time aliquoted, date/time expiring, and remaining onboard hours on the TANGO infinity Daily Reagents in Use Form
 | TANGO infinity: Daily Reagents in Use Form |
| 4 | Place aliquot of Rinsing Solution into position 1 or 2 of a room temperature reagent rack and load into Lane 1 of the room temperature reagent section. |  |
| 5 | QC does not need to be run when placing an aliquot of Rinsing Solution onto the TANGO infinity. |  |

**Table A: Examples of Bromelin Volume Preparation**

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| **Total Volume (ml)** | **Bromelin (ml)** | **Saline (ml)** | **% Volume (approx.)** |
| 55 | 2.75 | 52.25 | 100 |
| 50 | 2.5 | 47.5 | 90 |
| 45 | 2.25 | 42.75 | 80 |
| 40 | 2.0 | 38 | 70 |
| 35 | 1.75 | 33.25 | 60 |
| 30 | 1.5 | 28.5 | 50 |
| 25 | 1.25 | 23.75 | 40 |
| 20 | 1.0 | 19 | 30 |
| 15 | 0.75 | 14.25 | 20 |
| 10 | 0.5 | 9.5 | 10 |

**References:**

TANGO infinity® System User Manual, Version 1.7.1