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| **Making a 1.0% Donor Cell Suspension** | | | | | | | |
| **Purpose** | This procedure provides instructions for how to prepare a 1.0% donor unit red cell suspension from a unit segment of pilot tube required in performing AHG crossmatches using gel cards. | | | | | | |
| **Policy Statements** | * 1.0% red cell suspension are required for IH-Cards testing methodologies. * Diluted red cells should be used on the day of dilution. * The date of expiration for open containers IH-LISS Solution will not change if stored at proper conditions of 2-8°C and | | | | | | |
| **Related**  **Documents** | TS 4.6 Labeling Tubes | | | | | | |
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| **Materials** | **Equipment** | | | **Reagents** | | | **Supplies** |
| * Hematype segment device * 1000μL MLA pipette * 10μL MLA pipette | | | * IH-LISS Solution | | | * 12 x 75 mm tubes * MLA pipette tips |
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| **Sample** | Attached donor unit segment or pilot tube. | | | | | | |
| **Quality Control** | IH-LISS Solution should be visually checked to ensure that the liquid is not discolored, turbid or showing any signs of bacterial contamination.  Pipette calibrations are performed bi-annually. | | | | | | |
| **Procedure** |  | | | | | | |
|  | **Step** | Action | | | | | |
|  | 1 | Label 2 clean 12x 75 mm tubes the last 3 digits of the donor number or a unit ID labels. *Note: If working with a pilot tube, start at step 7.* | | | | | |
|  | 2 | Pinch the donor segment at the cells and plasma intersection.  Note: If no clear intersection:   1. Place the intact segment the 12 x 75 mm tube and centrifuge for 15 seconds in the serofuge. (OR) 2. Place the intact segment vertically in a rack until the cells settle. | | | | | |
|  | 3 | Place a Hematype device on top of the first labeled tube. | | | | | |
|  | 4 | Insert the cell end of the segment into the Hematype and squeeze the donor rbcs into the tube. | | | | | |
|  | 5 | Discard the Hematype and segment. | | | | | |
|  | 6 | Pipette 1.0 mL of room temperature IH-LISS Solution into the second labeled tube. | | | | | |
|  | 7 | Pipette 10μL of donor red cells from tube 1 (or pilot tube) into the tube with the IH-LISS Solution. | | | | | |
|  | 8 | Mix cells and diluent to resuspend. | | | | | |
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| **References** | 1. IH-Card test systems, Bio-Rad Medical Diagnostics GmbH, (current version) 2. IH-LISS Solution, Bio-Rad Medical Diagnostics GmbH, (current version) | | | | | | |
| **Approval**  **Workflow** | Transfusion Service/Technical Specialist | | | | | | |
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| **Historical Record** | **Version** | | **Written/Revised by:** | | **Effective Date:** | **Summary of Revisions** | |
| 1 | | J. Wenzel | | 02/08/2008 | Initial Version | |
|  | 2 | | S. Cassidy | | 5/11/2012 | Renumbered from TS 7.16 to TS 7.14 | |
|  | 3 | | S. Cassidy | | 02/17/2023 | Updated for new reagents | |