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| **Resolving Rh (D) Typing Discrepancies** | | | | | | | |
| **Purpose** | This procedure provides instructions for how to resolve Rh typing discrepancy. [TS 4.17 Rh typing](http://khan.childrensmn.org/Manuals/Lab/SOP/TS/PatTest/202233.pdf) | | | | | | |
| **Policy Statements** | * D typing discrepancies shall be investigated and resolved through clerical and serologic investigations. * Rh negative red cells shall be selected for transfusion until discrepancy is resolved. * AABB recommends RBC genotyping to resolve D variants. | | | | | | |
| **Related**  **Documents** | [TS 4.17 Rh typing](http://khan.childrensmn.org/Manuals/Lab/SOP/TS/PatTest/202233.pdf) | | | | | | |
| **Sample** | No special preparation of the patient is required prior to specimen collection. Blood should be collected and labeled according to approved policies and procedures  [Collection of Patient Specimens](http://www.childrensmn.org/Manuals/Lab/TransfusionSvc/012709.asp)  EDTA or clotted specimen should be tested within 14 days and stored at 2-8°C. | | | | | | |
| **Procedure** |  | | | | | | |
|  | **Step** | Action | | | | | |
|  | 1 | Recheck suitability of specimen. | | | | | |
| **If** | | | | **Then** | |
| any doubt about identity or the quality of the specimen. | | | | collect a new specimen and repeat testing. | |
|  | 2 | Verify reagent selection and repeat quality control if felt reagent is contaminated. | | | | | |
|  | 3 | Repeat testing on original sample using a new cell suspension. | | | | | |
| **If** | | | **Then** | | |
| problem is resolved | | | result patient testing results. | | |
| problem not resolved | | | Proceed to step 4 | | |
|  | 4 | Repeat testing on new specimen. | | | | | |
| **If** | | | **Then** | | |
| problem is resolved | | | result patient testing results. | | |
| problem not resolved | | | Proceed to step 5 | | |
|  | 5 | Perform weak D testing if Gel reaction is ≤1+ or mmediate spin reaction with anti-D is weakly positive .   1. Review previous testing reaction pattern. 2. Review the patient's diagnosis and transfusion history. 3. Read tubes microscopically looking for mixed field agglutination. | | | | | |
|  | 6 | Review patient's medical history. | | | | | |
| **If** | | | **Then** | | |
| Historic typed as Rh positive and  transfused with Rh negative  blood within the last three  months. | | | Perform weak D testing | | |
| Polyagglutination due to cold  agglutinins is suspected | | | * Maintain patient specimen at 37°C immediately after collection or warm tube at37°C for > 10 minutes. * Wash cell x 4 with 37°C prior to testing. | | |
|  | 7 | Forward specimen to reference lab for further testing if discrepancy is not resolved. Provide the following information:   * Transfusion history * Clinical condition * Medications * Ethnic background | | | | | |
|  |  | | | | | | |
| **Interpretation** | Refer to [TS 4.17 Rh typing](http://khan.childrensmn.org/Manuals/Lab/SOP/TS/PatTest/202233.pdf)  If the discrepancy cannot be resolved, enter the Rh interpretation into as INCONCLUSIVE RESULT | | | | | | |
| **Result Reporting** | 1. Record the final testing reactions in grids. [TS 5.6 Entering Results for a ABO and Rh typing](http://khan.childrensmn.org/Manuals/Lab/SOP/TS/SpecRR/202251.pdf) 2. Insert test BBC (key ‘) into the **Add Spec. test** box. 3. Result BBCC with a free text comment for special testing. | | | | | | |
| **References** | AABB Technical Manual, current edition | | | | | | |
| **Approval**  **Workflow** | Transfusion Service/Laboratory Director | | | | | | |
|  |  | | | | | | |
| **Historical Record** | **Version** | | **Written/Revised by:** | **Effective Date:** | | | **Summary of Revisions** |
| 1 | | J. Wenzel | 11/23/2009 | | | Initial Version |
| 2 | | J Wenzel | 4/10/2012 | | | Removed Reference to BioRad Reagents |
|  | 3 | | S. Cassidy | 02/17/2023 | | | Updated for new reagents. |