New Service Announcement

RHD Weak D Analysis

Performed at Carter BloodCare Tyler





- Investigation of RHD typing discrepancies
- Identification of weak D type 1, 2, or 3 for classification and recommendations for RHIG administration and transfusion



D Antigen Typing: 86901x4 Weak D Analysis: 81479



BACKGROUND: Current blood banking practices appear to be highly successful in preventing alloimmunization to the D antigen and hemolytic disease of the newborn due to the D antibody. However, the use of Rh immune globulin and Rh negative red blood cells for transfusion can be reduced by identifying weak D genotypes in pregnant women and women of childbearing age. Approximately 80% of people exhibiting a weak D phenotype were shown to be weak D type 1, 2, or 3 when RHD genotyping was included in testing, and these individuals can safely be treated as D positive. It is estimated that 13,360 pregnant women currently treated as D negative could be managed as D positive, reducing injections of Rh immune globulin by 24,700 annually and avoiding transfusion of Rh negative red blood cells when Rh positive red blood cells could be safely transfused.¹

Genotyping patients serologically identified as weak D or patients with a D typing discrepancy can be useful in determining if administration of RH immune globulin or transfusion of RH negative blood is necessary.



METHOD: ID RHD^{XT} assay, part of the BLOODchip^{ID} family of tests, is a genetic test that uses purified human genomic DNA to type allelic variants of genes encoding for the following allelic variants of the RHD gene: RHD*weak D type 1, RHD*weak D type 2, RHD*weak D type 3, RHD deletion, RHD*Pseudogene and RHD*DIIIa-CE(3-7)-D and ITGB3 gene (HPA-1 system): HPA1a and HPA1b.



LIMITATIONS

- ID RHDXT is for Research Use Only (RUO)
- ID RHD^{XT} may not detect alleles containing unreported mutations at primer binding sites or at probe binding sites.
- The predicted phenotype generated by the ID RHD^{XT} test is inferred only from the alleles described in the Intended Use.
- ID RHDXT will not detect any Weak D types other than 1, 2 or 3.



SPECIMEN REQUIREMENTS

5 ml EDTA (purple top) blood sample collected and shipped at room temperature.



PRICE INCLUDING DNA EXTRACTION \$165



TURNAROUND TIME Testing performed at least once per week



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Helping our partners meet AABB and CAP guidance standards for pregnant women and other females of childbearing potential.¹



SHIPPING REQUIREMENTS: Please notify the laboratory in advance of sending a patient sample for RHD analysis. Samples for testing and the accompanying paperwork should be delivered to one of the following addresses:

ATTN: Reference and Transfusion Laboratory

Carter BloodCare 2205 Highway 121 South Bedford, TX 76021 817.412.5740 Carter BloodCare
815 South Baxter Avenue
Tyler, TX 75701
903.363.0470

Samples may be delivered to Carter BloodCare by:

- Calling your local Reference laboratory to arrange for a sample pick-up.
- Utilizing your own courier service to deliver the sample to your local Reference laboratory.
- If patient samples will be mailed directly to Tyler, please call 903.363.0470 prior to shipping.



Your Partner in Optimizing Patient Care

At Carter BloodCare, we strive to offer quality services to our clients that offer cost-savings; reduce the strain on internal resources; yield laboratory efficiencies; deliver concierge service with an intentional focus on exceeding client needs; and, together, optimize patient care.

REFERENCES

1. Joint Statement on Phasing-In RHD Genotyping for Pregnant Women and Other Females of Childbearing Potential with a Serologic Weak D Phenotype, http://www.aabb.org/advocacy/statements/Pages/statement150722.aspx?PF=1