Sample Information (Please Print) *Attach copies of serologic investigation*

Sample Type: ☐ Whole blood ☐ Amniocytes ☐ Buccal swab ☐ DNA _____ (ng/µl)		
Subject Type: ☐ Patient ☐ Donor ☐ Other _____		
Last Name:	First Name:	MI:
Patient ID # or DIN:	Donor ID (DID#):	DOB:
Date/Time Sample Collected:	Gender: ☐ M ☐ F	
Race:	OB History:	Diagnosis:
Brief Transfusion History:	Rh phenotype (serologic):	
Additional Antigen Typing:	Antibody ID:	
Typing Discrepancy? ☐ N ☐ Y If Y, explain:		

Shipping Facility Information

Facility Name:	Facility Code:
Facility Address:	
Physician Name:	Telephone #:
Contact Person:	Telephone #:

Ordering Facility (if different from above)

Facility Name:		Customer Code:
Facility Address:		
Physician Name:		Telephone #:
Send Results to:	Fax #:	Email:

Testing Requested (see sample requirements and shipping information on the back)

Red Cell Antigen Prediction

☐ HEA Molecular Panel (includes C/c, E/e, V, VS, KEL, FY, JK, MNS, U, U variant, LU, DI, CO, DO, LW, SC)

☐ *RHCE* genotyping (weak, null and partial C, E, c, e, V, VS, hr^B and hr^S) (recommended for patients with sickle cell disease)

- ☐ reflex to *RHD* genotyping if *RHCE* results suggest D variant with risk of alloimmunization

☐ *RHD* genotyping (weak and partial D variants, altered C) (recommended for D+ patients with sickle cell disease)

- ☐ reflex to *RHCE* genotyping if *RHD* results suggest RHCE variants with risk of alloimmunization

☐ *RHD* and *RHCE* genotyping

☐ *RHD* zygosity (does NOT test for D variants)

☐ ABO Variants (contact the lab for more information)

☐ ABO Common alleles (A, A_2, B, O_1, O_2)

☐ non-Rh variant testing (specify antigen): _____

☐ cDNA analysis (specify blood group) _____

Platelet Antigen Prediction

☐ HPA panel (includes HPA-1, -2, -3, -4, -5, -6,-9, -15)

NOTE: for Neonatal Alloimmune Thrombocytopenia (NAIT) workups, submission of both maternal and paternal specimens is recommended; submit one request per subject.

Form Completed By (Name and Date): _____

NOTE: Do not complete this form if the testing was requested in Bloodhub Connect.

Sample Requirements and Shipping Information

All patient samples and the Request for Molecular Testing form **must** be clearly labeled with the full name of the individual and a unique identification number. The information on the tube must match the information on the request form.

Sample labels should include date and time of collection.

All donor samples must be clearly labeled with the Donation Identification Number (DIN)

Sample Requirements

Whole Blood: **5-10 ml** whole blood in EDTA (lavender top) tube. If submitting pre- and post-transplant samples, clearly label them as such and submit separate service requests.

Blood specimens submitted for genomic DNA analysis should be less than 10 days old for optimal DNA yield. Older specimens may yield insufficient material for testing.

Blood specimens submitted for cDNA analysis should be pretransfusion and less than 7 days old for optimal RNA yield.

Amniocytes: **1-5 ml** amniotic fluid or **1-5x10^6** cultured amniocytes. A maternal blood sample is required when submitting fetal sample. Submit with separate service requests. Microsatellite analysis (HLA020) is performed on all maternal and amniocyte submissions to rule out maternal cell contamination (MCC). If MCC is detected, testing will not be performed.

Buccal swabs: Use sterile cotton-tipped applicator. Air dry swab before shipment in sterile tube without media. Submission of at two to four swabs per subject is recommended.

Genomic DNA: 20 uL of 25 ng/uL is required for most testing. Call for more information.

Restrictions

Lithium heparin sample tubes are **NOT** acceptable for testing.
Leukoreduced samples **DO NOT** yield acceptable DNA quantities for testing.
Samples without sufficient information for unique identification will be rejected.

Shipping Requirements

Ship at room temperature (whole blood) or refrigerated using ice packs or wet ice sealed in plastic bags (amniocytes, buccal swabs), according to DOT regulations for biological specimens.

Buccal swabs (dried completely) before packaging in a conical tube or plastic bag and shipping using ice packs or wet ice.

Wrap samples in absorbent materials to safeguard from freezing or breakage.

Ship all samples “Next Day” delivery. Contact the lab if shipping for weekend delivery.

Shipping Address

American Red Cross
National Molecular Laboratory
700 Spring Garden Street
Philadelphia, PA 19123

Laboratory Phone #: 1-215-451-4917
Fax #: 1-215-451-2506 or 1-215-451-4925
E-mail: NationalMolecular@redcross.org

What this form is about

This form is used to request molecular testing and to document information associated with the sample being submitted, in circumstances where service request cannot be placed using Bloodhub Connect online portal.

Who should use this form

This form applies to the National Molecular Laboratory customers who do not have access to Bloodhub Connect who need to submit samples for molecular testing, as well as staff members who receive samples for molecular testing and those who supervise this process.

Instructions

The following are requirements for testing requests.

1. Complete a separate request form for each individual on whom testing is being requested.

   NOTE: Do not complete paper request if service request is placed in Bloodhub Connect.

2. Attach copies of the serologic investigation in addition to the request form, if applicable.
3. Samples can be shipped using any carrier (for example, American Red Cross driver (local customers, Fed Ex, UPS, etc.) according to the sample requirements and shipping outlined on page 2 of this form.
4. When testing is complete, if customer does not have Bloodhub Connect account, report will be released via fax or encrypted email.

The instruction table below provides detailed instructions for the form fields which may not be easy to understand.

In the field...	Record...
Last Name, First Name, Middle Initial (MI)	The last name, first name and middle initial (if known) of the patient. Patient refers to any patient, donor, family member, etc. whose sample is submitted for testing
Obstetrical (OB) History	Any obstetrical history or procedures performed
Send Results to	The full name of the person who should receive the testing results

Revision History

Revision Number	Summary of Revisions
1.0	Converted from 16.4.Zfrm113 W2022 v 1.0, Request for Molecular Testing. Sample information revised to include sample type, prenatal genotyping removed, sample information and sending facility information revised to increase usability, expanded testing requested, samples requirements revised to include more general whole blood requirements, added leukoreduction to restrictions. Changed Fax number, expanded information about sample requirements and shipping requirements, separated ABO testing into variant and common testing, eliminated individual system testing that is available on the HEA and HPA BeadChips, removed D antigen from Rh Common alleles test, added section to indicate if associated with typing discrepancy, highlighted the requirement for racial information, added DNA as sample type, reorganized last name, first name entries for ease of use, added area to input ordering institution contact information if different from sending institution, added Philadelphia, PA address, updated email address.
2.0	Revised *RHD* Zygosity (no longer includes E/e, C/c); added non-Rh variant and cDNA analysis options; updated form to allow customer to request reflex with RHD and RHCE genotyping. revised specimen and shipping instructions to harmonize with recently developed Hospital Marketing Sample Preparation and Shipping Instructions document. Added information about submitting genomic DNA for testing; added note that microsatellite analysis is used for assessment of maternal cell contamination of amniocyte specimens; added recommendation to submit maternal and paternal samples for NAIT workups, added guidance that paper form should not be completed if request is entered into Bloodhub Connect; revised instructions regarding release of reports via fax or encrypted email.

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