Special Testing Laboratory Available Testing

Reference Document

This document lists the available testing for the Special Testing Laboratory.

Flow Cytometry							
Assay	**Test Description**	**Minimum Sample Volume**	**Sample Age**	**Sample Type**	**Shipping**	**Turnaround Time**	**How to Order**
CD34/45	• Provides viable CD45 cells (cells/µL), viable CD34 cell count (cells/µL), total CD45 cells (cells/µL), total CD34 cell count (cells/µL), CD34 viability (%), CD45 viability (%), and percentage of viable CD34 cells out of viable CD45 cells (%) • Includes viability	500 µL	< 48 hours	• Cord blood • Whole blood (pre collection) • Leukopak • Mobilized HPC • Isolated Cells	• **Fresh:** Cold packs/wet ice (2 to 8°C) • **Frozen:** Dry ice	• **Routine:** 24 hours from receipt • **STAT:** 2 hours from receipt	Email the completed *Request for Flow Cytometry Testing* and shipping tracking number/expected time of sample drop off (if local) to qc@lifesouth.org.
Cell Count and Viability	• Provides percentage of viable cells (%) and cell count (cells/µL)	500 µL	< 48 hours	• MSC • CD34 cells	• **Fresh:** Cold packs/wet ice (2 to 8°C) • **Frozen:** Dry ice	• **Routine:** 24 hours from receipt • **STAT:** 2 hours from receipt	
TBNK	• Provides cell count of CD45, CD19, CD3, CD4, CD8, CD19 and CD56 cells (cells/µL) • Provides percentage out of CD45 cells (%) • Does not include viability	500 µL	< 48 hours	• Cord blood • Whole blood (pre collection) • Leukopak • Mobilized HPC • Isolated Cells	• **Fresh:** Cold packs/wet ice (2 to 8°C) • **Frozen:** Dry ice	24 hours from receipt	
Viability only	Provides percentage of viable CD45 cells (%)	500 µL	< 48 hours	• Cord blood • Whole blood (pre collection)	• **Fresh:** Cold packs/wet ice (2 to	• **Routine:** 24 hours from receipt	

				• Leukopak • Mobilized HPC • Isolated Cells	8°C) • **Frozen:** Dry ice	• **STAT:** 2 hours from receipt	

Genotyping							
Assay	**Test Description**	**Minimum Sample Volume**	**Sample Age**	**Sample Type**	**Shipping**	**Turnaround Time**	**How to Order**
ABO Genotyping	Predicted ABO blood grouping based on SNP analysis, including some of the more commonly encountered subtypes	≥ 3 mL	< 10 days	EDTA tube	Cold packs/wet ice (2 to 8°C)	• **Routine:** 7 days • **STAT:** 3 days	Email the completed *Request for Special Testing Laboratory Services* along with the shipping tracking number/expected time of sample drop off (if local) to qc@lifesouth.org.
Genotyping for assorted blood group systems	• Genotype/phenotype prediction for an extended variety of RBC and platelet antigens Able to target most ISBT-listed groups and molecular variants, subject to prior validation	≥ 3 mL	< 10 days	EDTA tube	Cold packs/wet ice (2 to 8°C)	7 days	
RBC Genotyping (IDCORE XT)	IVD assay that provides predicted genotype/phenotype of common RBC antigens, including MNS, RHCE, Kell, Kidd, Duffy, Diego, Dombrock, Colton, Cartwright, and Lutheran systems	≥ 3 mL	< 10 days	EDTA tube	Cold packs/wet ice (2 to 8°C)	• **Routine:** 7 days • **STAT:** 3 days	
RH Genotyping	Genotype/phenotype characterization of RHD and RHCE system, including commonly encountered weak and partial antigen expressing variants	≥ 3 mL	< 10 days	EDTA tube	Cold packs/wet ice (2 to 8°C)	• **Routine:** 7 days • **STAT:** 3 days	

HLA/Platelet Refractory Workups							
Assay	**Test Description**	**Minimum Sample Volume**	**Sample Age**	**Sample Type**	**Shipping**	**Turnaround Time**	**How to Order**
Donor HLA Antibody Screen (Class I and II)	Detection of HLA class I and II antibodies	≥ 3 mL	< 10 days	Serum tube or EDTA tube	Cold packs/wet ice (2 to 8°C)	2 days	Email the completed *Request for Special Testing Laboratory Services* along with the shipping tracking number/expected time of sample drop off (if local) to qc@lifesouth.org.
Donor HLA Typing High Resolution (Send out)	High-resolution typing of A, B, C, DRB1, DRB345, DQB1, and DPB1	≥ 3 mL	< 10 days	EDTA or ACD tube	Cold packs/wet ice (2 to 8°C)	• 14 to 30 days	
HLA Antibody Identification Class I	Identification of HLA Class I antibodies, including cPRA calculations	≥ 3 mL	< 10 days	Serum tube or EDTA tube	Cold packs/wet ice (2 to 8°C)	• **Routine:** 7 days • **STAT:** 3 days	
Patient HLA Antibody Class I Screen	Detection of HLA class I antibodies	≥ 3 mL	< 10 days	Serum tube or EDTA tube	Cold packs/wet ice (2 to 8°C)	• **Routine:** 7 days • **STAT:** 3 days	
Patient HLA Class 1 Low Resolution	Low resolution (serological equivalent) for A and B loci for platelet matching	≥ 3 mL	< 10 days	EDTA or ACD tube	Cold packs/wet ice (2 to 8°C)	• **Routine:** 7 days • **STAT:** 3 days	
Platelet Antibody Identification	Detection and identification of HPA1, 2, 3, 4, and 5 antibodies	≥ 3 mL	< 10 days	Serum tube or EDTA tube	Cold packs/wet ice (2 to 8°C)	7 days	

Assorted							
Assay	**Test Description**	**Minimum Sample Volume**	**Sample Age**	**Sample Type**	**Shipping**	**Turnaround Time**	**How to Order**
Deionized Water QC	• Detection of bacteria/ organisms in clinical laboratory reagent water • Reported as acceptable (≤10CFU/mL) or unacceptable (>10 CFU/mL)	50 mL	Must be received within 24 hours of collection	Sterile container	Cold packs/wet ice (2 to 8°C)	2 weeks	Email the completed *External Deionized Water QC Worksheet* along with the shipping tracking number/expected time of sample drop off (if local) to qc@lifesouth.org.
Hemoglobinopathy Testing	• Testing by Capillary electrophoresis • Detection of abnormal hemoglobin	≥ 3 mL	<7 days at 2 to 8°C	EDTA	Cold packs/wet ice (2 to 8°C)	7 days	Email the completed *Request for Special Testing Laboratory Services* along with the shipping tracking number/expected time of sample drop off (if local) to qc@lifesouth.org.

Product Quality Control							
Assay	**Test Description**	**Minimum Sample Volume**	**Sample Age**	**Sample Type**	**Shipping**	**Turnaround Time**	**How to Order**
Cryoprecipitated Components - Normal Cryo QC	Factor VIII and Fibrinogen testing on Cryo units	NA	NA	Frozen Units	Dry ice	2 weeks	Email the completed *Sample Submission for Cryoprecipitated Components - External Customers* along with the shipping tracking number/expected time of sample drop off (if local) to qc@lifesouth.org.
Cryoprecipitated Components - Normal Cryo QC	Fibrinogen testing on PRCFC/IFC units	NA	NA	Frozen Units	Dry ice	2 weeks	
Sysmex XN-10 Alternative Assessment for Transfusion-Related Cell Counts (Platelet Count and WBC in Platelet/RBC Products): Email Kelly Anderson for more details at klanderson@lifesouth.org.							