

Appendix A

Specimen Collection General Information

Specimen Collection Tube Guide

Red Top Tube (Plain)

1. Does not contain an additive of any kind
2. Used for serum determinations in Chemistry, Immunology and HLA

Red with Gray Speckled Tube (SST)

1. Contains a clot activator and gel for serum separation SST brand tube for serum determinations in chemistry
2. Invert tube at least 5 times to ensure adequate mixing

Royal Blue Top Tube ("Metal")

1. Contains one of the following (check tube label carefully !!)
 - Sodium Heparin
 - Sodium EDTA (Na₂EDTA)
 - None
2. For trace elements, toxicology and nutrient determinations
3. Invert tube at least 8 times to ensure adequate mixing
4. Only Sodium Heparin is acceptable for Cytogenetic Cultures

Green Top Tube (Heparin)

1. Contains one of the following (check tube label carefully !!)
 - a. Sodium Heparin (note restrictions below)
 - b. Lithium Heparin (note restrictions below)
 - c. Ammonium Heparin
2. Only Sodium Heparin is acceptable for Immunology testing. Please check tube label carefully.
3. Only Sodium Heparin is acceptable for Cytogenetic cultures.
4. Lithium Heparin is suitable for most chemistry assays, but NOT lithium drug levels.
5. Invert tube at least 8-times to ensure adequate mixing.
6. Only Sodium Heparin is acceptable for Flow Cytometry testing.

Purple Top Tube (EDTA)

1. Contains one of the following (check tube label carefully !!)
 - a. Liquid K₃ EDTA or
 - b. Freeze-dried Na₂EDTA
 - c. Silicone-coated liquid EDTA
2. Use the Silicone-coated liquid EDTA only for ACTH specimens
3. For whole blood hematology determinations. Use a 3 ml tube. Invert tube at least 8 times to ensure adequate mixing.
4. May be used for Blood Bank testing

Light Blue Top Tube (Citrate)

1. Contains the following (check tube label carefully !!)
 - a. .105 M Sodium Citrate (3.2%)
2. For coagulation determinations on plasma specimens
3. Invert tube at least 8-times to ensure adequate mixing. NOTE: It is very important the tubes are allowed to fill to the specified volume.




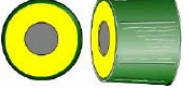









Yellow Top Tubes (ACD-A)

1. Contains Acid Citrate Dextrose solution A
2. For whole blood Immunology determinations.
3. The tube must be filled completely. Invert tube at least 8-times to ensure adequate mixing.
4. Use only when Sodium Heparin tubes are unavailable.
5. Use for HLA (Histocompatibility) testing

Pink Top Tubes (K3 EDTA)

1. Use for Blood Bank testing












TUBE TYPE AND COLOR:

	Anticoagulant	Inner Ring Color	Cap Color
	PLEASE NOTE: All tubes with <u>white</u> inner rings are <u>Pedi draws</u> only !		
	Serum Tube/clot activator	Black	Red
	Serum Tube/gel and clot activator	Yellow	Red
	Lithium Heparin	Black	Green
	Gel and Lithium Heparin	Yellow	Green
	Sodium Heparin	Black	Green
	Sodium Citrate	Black	Light Blue
	EDTA	Black	Lavender
	Sodium Fluoride	Black	Grey
	ACD-B	Black	Yellow
	ACD-A	Black	Yellow
	Sodium Citrate	Black	Black
	EDTA (Blood Bank)	Black	Pink
	Sodium Heparin	Black	Royal Blue

Tube Stopper Color & Type of Additive

	Red Stopper	No Additive (BD)
	Red Black Stopper	Clot Activator (Greiner)
	Red Yellow Stopper	Clot Activator/ (Greiner) Serum Separator Gel (SST)
	Gray Stopper	Potassium Oxalate/ Sodium Fluoride
	Green Stopper	Sodium or Lithium Heparin
	Light Blue Stopper	Sodium Citrate
	Lavender Stopper	Liquid K₂EDTA
	Yellow Stopper	Acid Citrate Dextrose (BD)
	Royal Blue Stopper	May have EDTA <u>Or</u> No Additive
	Pink Stopper	EDTA (Greiner)

**Stopper Colors
&
Most Common Laboratory Use**

Stopper Color	Laboratory Use
 Red Stopper	Chemistry & Serology
 Red/Black Stopper	Chemistry & Serology
 Red/Yellow Stopper	Chemistry & Serology
 Gray Stopper	Lactic Acid
 Green Stopper	Chemistry or Stat Chemistry
 Light Blue Stopper	PT, PTT, Coagulation
 Lavender Stopper	<p><u>Hematology</u> (CBC & Sed Rate) 2- three ml tubes</p> <p><u>Blood Bank</u> (3 ml. tube) Pediatric Patients * May also be substituted for pink stopper when drawing adult patients</p> <p><u>Special Chemistry</u> - Hgb A₁C and Electrophoresis</p>
 Yellow Stopper	DNA, Paternity Testing
 Royal Blue with EDTA	Lead and Zinc
 Royal Blue – No Additive	Copper
 Pink Stopper	Universal Color for Blood Bank