

114825.199 Evacuated Blood Collection Tubes Contents and Use

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Organization Great River Health System

Approval and Periodic Review Signatures

Type	Description	Date	Version	Performed By	Notes
Approval	Lab Director	10/20/2022	3.0	Alexander Pederson MD	
Approval	Administrative Director	10/17/2022	3.0	Lori Bennett	
Approval	Lab Director	6/23/2021	2.0	Alexander Pederson	
Approval	Administrative Director	6/22/2021	2.0	Natalie Sailors	
Periodic review	Designated Reviewer	10/16/2020	1.1	Natalie Sailors	
Approval	Administrative Director Approval	9/28/2020	1.1	Natalie Sailors	
Approval	Lab Director	10/19/2018	1.0	Alexander Pederson	
Approval	Administrative Director	10/19/2018	1.0	Natalie Sailors	

Version History

Version	Status	Type	Date Added	Date Effective	Date Retired
3.0	Approved and Current	Major revision	10/14/2022	10/20/2022	Indefinite
2.0	Retired	Major revision	6/21/2021	7/1/2021	10/20/2022
1.1	Retired	Minor revision	9/28/2020	9/28/2020	7/1/2021
1.0	Retired	Initial version	10/18/2018	10/19/2018	9/28/2020

Laboratory Policies & Procedures

Number	114825.199
Southeast Iowa Regional Medical Center Applies to: <input checked="" type="checkbox"/> West Burlington Campus <input checked="" type="checkbox"/> Fort Madison Campus <input checked="" type="checkbox"/> Hospital <input type="checkbox"/> Clinic <input type="checkbox"/> Klein Center <input type="checkbox"/> Rural Health Clinic <input type="checkbox"/> Hospice <input type="checkbox"/> Family Planning <input type="checkbox"/> Hospital-Based Clinics	

Evacuated Blood Collection Tubes: Contents and Use

Purpose:

This procedure provides instructions for the contents and use of evacuated blood collection tubes used to collect, transport, process and store blood for testing serum, plasma or whole blood in the clinical laboratory.

Policy:

Evacuated blood collection tubes, needles and holders are used together as a system for the collection of venous blood.

These tubes are evacuated plastic tubes that have a pre-measured vacuum. This vacuum provides the force which draws the blood from the vein. These tubes are sterile and contain various blood clotting inhibitors or clot activator. Each is designed to draw the proper amount of blood and preserve that specimen for the requested tests. The tubes are color coded according to the different types of anticoagulants each contains. The following is a list of the tubes commonly used.

Stopper Color	Additive	Specimen Handling
Red	Clot activator, Silicone coated (plastic)	Invert gently 5 times
Gold/SST	Silicone coated with separator gel	Invert gently 5 times
Lavender	Spray-coated K2EDTA(plastic)	Invert gently 8 times
Light Green	Lithium heparin and gel for plasma separation	Invert gently 8 times
Light Blue	Buffered sodium citrate 0.109 M (3.2%) (plastic)	Invert gently 3-4 times
Grey	Sodium Fluoride /Potassium Oxalate	Invert gently 8 times
Pink	Spray-coated K2EDTA(plastic)	Invert gently 8 times
Yellow/ACD	Acid citrate dextrose additives (ACD)	Invert gently 8 times
Dark Green	Lithium Heparin	Invert gently 8 times
Royal Blue	K2EDTA (plastic)	Invert gently 5 times
Royal Blue	Plain – Metal Free (for Heavy Metals) Clot activator (plastic serum)	Invert gently 5 times

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Procedure notes:

It is important to **gently** invert the evacuated tubes after collecting the specimen to ensure proper mixing of blood and anticoagulant or activation of clotting accelerator.

Additives inside each tube are utilized for specific tests. **Do not pour the contents of one tube into another.**

References:

<http://www.bd.com/en-us/offerings/capabilities/specimen-collection/specimen-collection-resource-library?contenttype=965>