



BLOOD CULTURE BOTTLES

**SPECIMEN
WHOLE BLOOD**

**DEPARTMENT
MICROBIOLOGY**

**COMMON TESTS
BLOOD CULTURE**

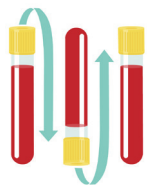
REASON FOR ORDER

Needs to be sterile.
Minimized chance of contamination if collected first.

HOW IT WORKS

Binds calcium.
Reduces complement.
Slows down phagocytosis.
Contain nutrient broth for bacterial growth.
Contain antibiotic absorbing resin beads.

Blood
Culture



MIXING

Invert several times to avoid clotting and to neutralize antibiotics in patient blood.

SPECIAL CONSIDERATIONS

One collection includes 2 bottles.
Detailed information covered later in the program.

ORDER OF DRAW



culture
bottle

blood culture

Stop



SPS

Light



Lt. Blue

Red



Red

Stay



SST

Put



PST

Green



Green

LEts



Lavender

Go



Grey



SODIUM POLYANETHOL SULFONATE

SPECIMEN
WHOLE BLOOD

DEPARTMENT
MICROBIOLOGY

COMMON TESTS
BLOOD CULTURE

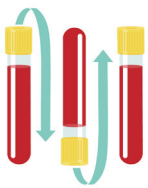
REASON FOR ORDER

Needs to be sterile.
Minimized chance of contamination
if collected first.

HOW IT WORKS

Binds calcium.
Reduces complement.
Slows down phagocytosis.

SPS



MIXING

Requires immediate mixing.
8–10 gentle inversions.

SPECIAL CONSIDERATIONS

Rarely used.
Alternate collection method for blood
culture bottles.
Needs to be transferred to blood
culture bottle.

ORDER OF DRAW



blood culture

Stop



SPS

Light



Lt. Blue

Red



Red

Stay



SST

Put



PST

Green



Green

LEts



Lavender

Go



Grey



SODIUM CITRATE

**SPECIMEN
CENTRIFUGE FOR
PLASMA**

**DEPARTMENT
COAGULATION
SECTION OF HEMATOLOGY**

**COMMON TESTS
COAGULATION TESTS:
PT/PTT – TEST WITHIN 4
HOURS PREFERABLY,
OR < 24 HOURS.**

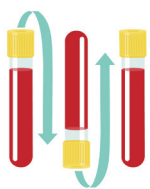
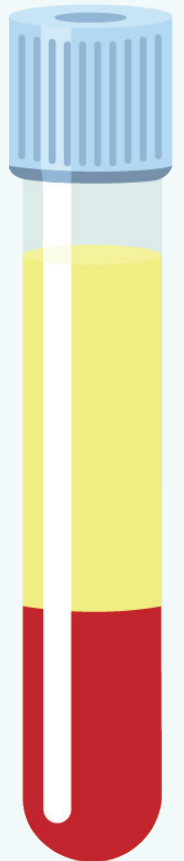
REASON FOR ORDER

Before all other additive tubes because all other additives affect coagulation.

HOW IT WORKS

Removes calcium by binding or chelating so blood cannot clot.
Best for preserving clotting factors.

Light
Blue



MIXING

Requires immediate mixing.
3–4 gentle inversions.

SPECIAL CONSIDERATIONS

1:9 ratio of blood to anticoagulant



CRITICAL

Must be filled to at least 90%

ORDER OF DRAW



culture
bottle

blood culture

Stop



SPS

Light



Lt. Blue

Red



Red

Stay



SST

Put



PST

Green



Green

LEts



Lavender

Go



Grey



PLAIN SERUM TUBE

SPECIMEN

CLOT FOR 30 MINUTES &
CENTRIFUGE FOR SERUM

DEPARTMENT CHEMISTRY

COMMON TESTS
DRUG TESTING &
MOST ROUTINE
CHEMISTRY TESTS

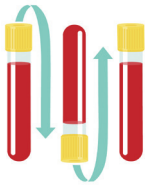
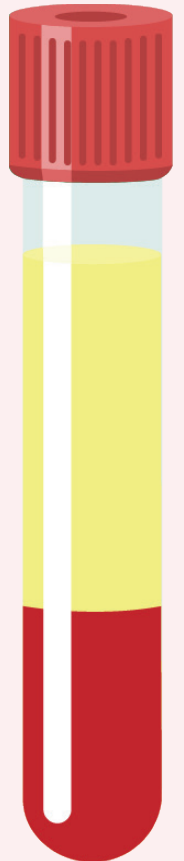
REASON FOR ORDER

After coagulation tubes so it does not
affect coagulation test results.

HOW IT WORKS

Silica (glass particles) can activate clotting.
Speeds up clotting by activating platelets.

Red



MIXING

Requires mixing 5–10 times if
clot activator in tubes.

SPECIAL CONSIDERATIONS

Serum must be removed from cells after
centrifugation to prevent the cells from
metabolizing substances such as glucose in
the serum.
Glass tubes may not contain silica.
Plastic tubes contain silica.

ORDER OF DRAW



Stop



SPS

Light



Lt. Blue

Red



Red

Stay



SST

Put



PST

Green



Green

LEts



Lavender

Go



Grey



SERUM SEPARATOR TUBE (SST)

SPECIMEN

CLOT FOR 30 MINUTES &
CENTRIFUGE FOR SERUM

DEPARTMENT CHEMISTRY

COMMON TESTS

ROUTINE CHEMISTRY
TESTS. SOME SPECIFIC
TESTS REQUIRE SERUM.
EXAMPLES: UREA, B12,
BILIRUBIN.

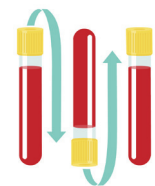
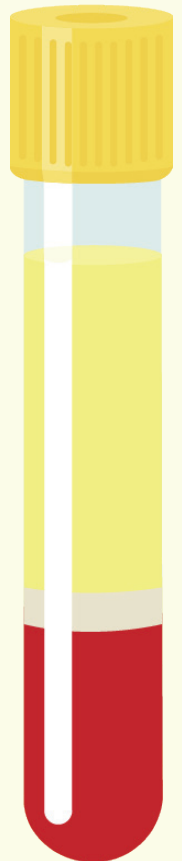
REASON FOR ORDER

After coagulation tubes so it does not
affect coagulation test results.

HOW IT WORKS

Silica speeds up clotting by activating platelets.
Gel separator forms a physical barrier
between cells and serum to stop
metabolizing substances such as glucose.

SST



MIXING

5 inversions to mix in
clot activator.

SPECIAL CONSIDERATIONS

Blood will clot without mixing, but if tube
is not mixed, silica particles can stay in
serum and affect testing.
Gel separator can affect some tests,
like drug testing.

ORDER OF DRAW



culture
bottle

blood culture

Stop



SPS

Light



Lt. Blue

Red



Red

Stay



SST

Put



PST

Green



Green

LEts



Lavender

Go



Grey



PLASMA SEPARATOR TUBE (PST)

**SPECIMEN
CENTRIFUGE FOR
PLASMA**

**DEPARTMENT
CHEMISTRY**

COMMON TESTS
STAT CHEMISTRY TESTS
SOME SPECIFIC TESTS
REQUIRE PLASMA.
EXAMPLES: AMMONIA,
USUALLY ELECTROLYTES.

REASON FOR ORDER

Can affect serum specimens so collect
after serum.

Affects coagulation tests

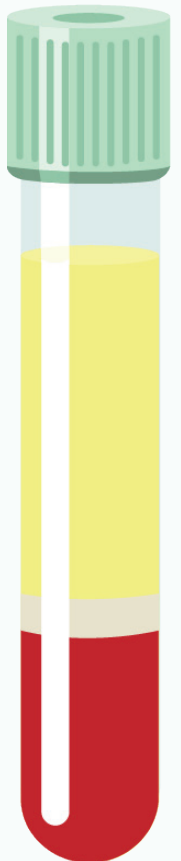
HOW IT WORKS

Lithium Heparin.

Heparin inhibits thrombin.

Gel separator forms a physical barrier
between cells and plasma to stop
metabolizing substances such as glucose.

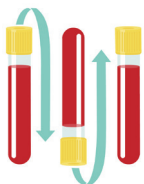
PST



SPECIAL CONSIDERATIONS

Used for STAT tests.

No clotting time required.



MIXING

Requires immediate mixing.
5–10 gentle inversions.

ORDER OF DRAW



culture
bottle

blood culture

Stop



SPS

Light



Lt. Blue

Red



Red

Stay



SST

Put



PST

Green



Green

LEts



Lavender

Go



Grey



HEPARIN TUBE

SPECIMEN

CENTRIFUGE FOR PLASMA
SOME WHOLE BLOOD TESTS

DEPARTMENT CHEMISTRY

COMMON TESTS

STAT CHEMISTRY TEST
MOST ROUTINE
CHEMISTRY TESTS
SOME SPECIFIC TESTS
REQUIRE PLASMA AND
CANNOT USE A GEL
SEPARATOR.

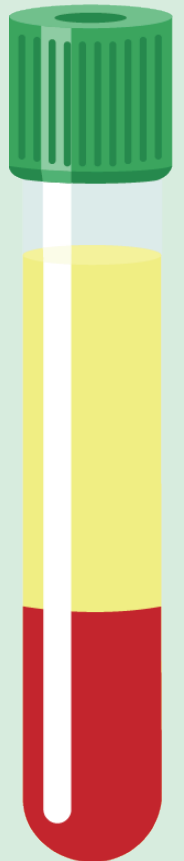
REASON FOR ORDER

Can affect serum specimens so
collect after serum.
Affects coagulation tests.

HOW IT WORKS

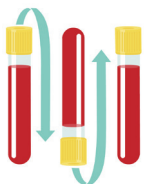
Can be Sodium Heparin or Lithium
Heparin.
Inhibits thrombin.

Green



SPECIAL CONSIDERATIONS

Used for STAT tests.
No clotting time required.
Plasma must be removed from cells after
centrifugation to prevent the cells from
metabolizing substances such as glucose.



MIXING

Requires immediate mixing.
5–10 gentle inversions.

ORDER OF DRAW



Stop



SPS

Light



Lt. Blue

Red



Red

Stay



SST

Put



PST

Green



Green

LEts



Lavender

Go

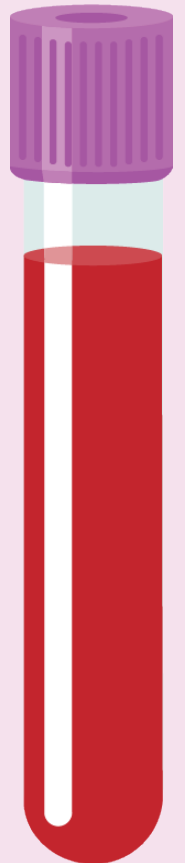


Grey



EDTA TUBE

Lavender



SPECIMEN

WHOLE BLOOD FOR
HEMATOLOGY
CENTRIFUGE FOR
TRANSFUSION SERVICES

DEPARTMENT

HEMATOLOGY
TRANSFUSION
SERVICES

COMMON TESTS

CBC – TEST WITHIN 6 HOURS
PREFERABLY OR <24 HOURS.
ESR – CAN HAVE SPECIALLY
SHAPED TUBE
TYPE & SCREEN
CROSSMATCH

REASON FOR ORDER

Responsible for more carry-over problems
than any other additive.

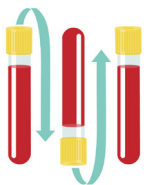
HOW IT WORKS

Removes calcium by binding or
chelating so that blood cannot clot.
Preserves blood cell morphology.
Inhibits platelet aggregation.

SPECIAL CONSIDERATIONS

Spray dried EDTA is preferred.
Liquid EDTA can cause dilution so filling
tube is important.

MIXING



Must be mixed immediately
after collection to prevent
platelet clumps
and micro clots.
8–10 inversions recommended.

ORDER OF DRAW



culture
bottle

blood culture

Stop



SPS

Light



Lt. Blue

Red



Red

Stay



SST

Put



PST

Green



Green

LEts



Lavender

Go



Grey



POTASSIUM OXALATE & SODIUM FLUORIDE

**SPECIMEN
CENTRIFUGE FOR
PLASMA**

**DEPARTMENT
CHEMISTRY**

**COMMON TESTS
GLUCOSE
ALCOHOL**

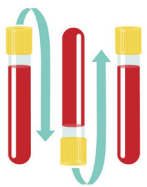
REASON FOR ORDER

Can affect chemistry and hematology tests so it is collected last.

HOW IT WORKS

Potassium Oxalate removes calcium by making it a salt.
Sodium Fluoride is an antiglycolytic agent that preserves glucose.

Grey



MIXING

Requires immediate mixing.
5–10 gentle inversions.

SPECIAL CONSIDERATIONS

Not a common tube.
Plasma must be removed from cells after centrifugation to prevent the cells from metabolizing substances such as glucose.

ORDER OF DRAW



Stop



SPS

Light



Lt. Blue

Red



Red

Stay



SST

Put



PST

Green



Green

LEts



Lavender

Go



Grey