

Figure 1. Components of Blood

The circulatory system delivers nutrients throughout the body by circulating blood in our system. Blood picks up chemical and molecular cues from different parts of the body thereby getting a representation of the state of health of the individual. Since blood drawing techniques have been developed, laboratory testing has been useful in guiding physicians on their medical decisions.

## WHY SEPARATE BLOOD COMPONENTS FOR CLINICAL TESTING?

The liquid component of the blood contains the analytes that are detected in clinical chemistry tests. Results of testing are affected when other cells present in the blood interact with the serum or plasma. Thus, prompt centrifugation is recommended to separate the cells from other components after blood collection.

## SEPARATION BY CENTRIFUGATION

The choice of sample type depends on the clinical assay to be performed. In general, serum samples (liquid component/plasma without clotting factors) are used for clinical testing as they do not contain any anticoagulant that may interfere with downstream testing.

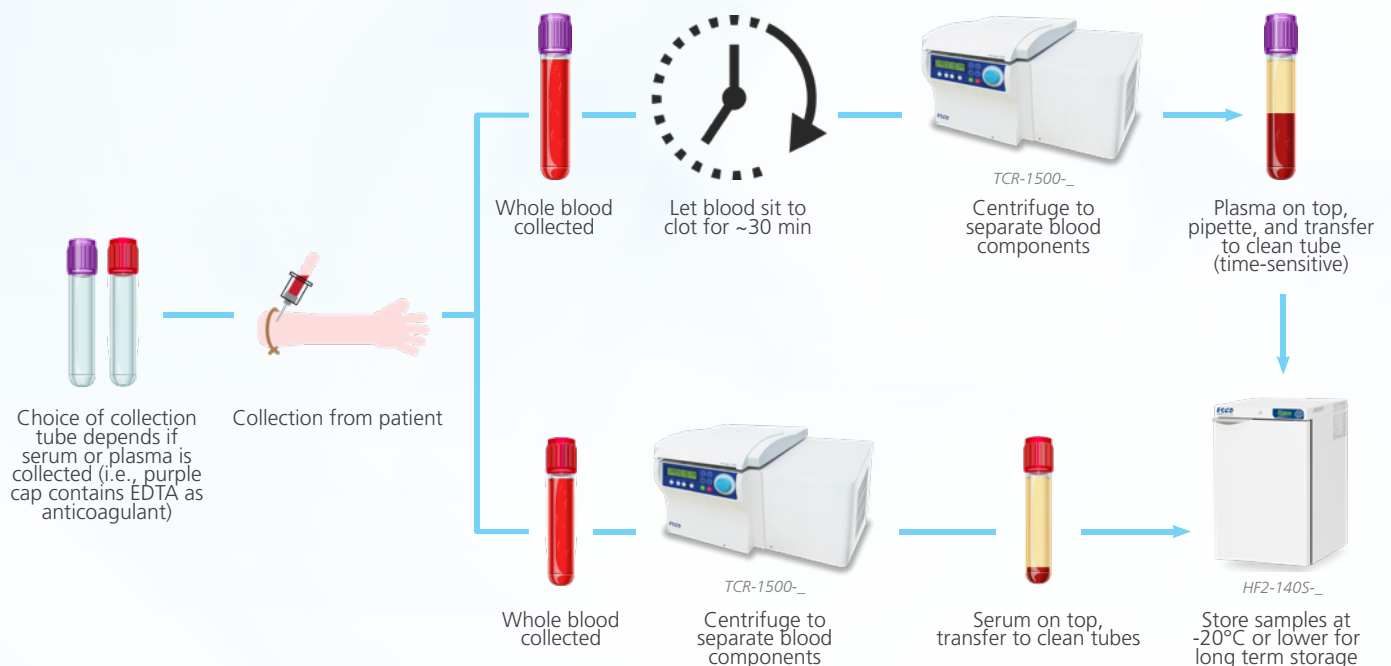


Figure 2. Separation of blood into serum and plasma.

The performance of centrifuge in clinical laboratories is critical for the separation of liquid and solid components. Efforts to enhance and speed up the clinical lab procedures have led to the generation of Esco high-quality centrifuges created to reduce tedious operations.

## Esco Versati™ Centrifuge: Accuracy and Credibility in Centrifugation!

Reference:

[1] Edward-Elmhurst Health. June 2016. Centrifuging Serum and Plasma. <https://www.eehealth.org/-/media/files/edward-elmhurst/services/lab/centrifuge-operation-062016.pdf>

