CLAIMS

1. A container for collecting blood, comprising a first end and a second end and at least one interior wall defining a reservoir comprising a continuous portion without a separating element for receiving the blood, wherein a surface of an interior wall of the said continuous portion is precoated with a mixture comprising thrombin and a polycarboxylic acid compound having a molecular weight of less than about 500 g/mol, and a closure, wherein the thrombin and polycarboxylic acid are in the same location within the continuous portion, such that the blood is received directly into the continuous portion wherein the mixture is immediately mixed with the blood when the blood is received into the container.

2. The container of claim 1, wherein said polycarboxylic acid compound is selected from the group consisting of citrate and isocitrate.

3. The container of claim 1, wherein a concentration of said polycarboxylic acid compound ranges from about 0.5 mM to about 100 mM in the mixture.

4. The container of claim 3, wherein a concentration of said polycarboxylic acid compound ranges from about 1 mM to about 50 mM of in the mixture.

5. The container of claim 1, wherein said collection container further comprises an additive selected from the group consisting of a water-soluble polymer and a sugar.

6. The container of claim 5, wherein said water-soluble polymer is selected from the group consisting of polyvinylpyrrolidone, polysaccharides, and polyethyleneglycol.

7. The container of claim 5, wherein said sugar is selected from the group consisting of dextran, cyclodextrins, trehalose, lactose, sucrose, glucose, mannitol, and sorbitol.

8. The container of claim 1, further comprising a separating element disposed in the reservoir but not disposed in the continuous portion.

9. The container of claim 8, wherein said separating element comprises a gel composition.

10. The container of claim 9, wherein said gel composition comprises a thixotropic gel.

11. The container of claim 10, wherein said gel composition is contained in a capsule.

12. The container of claim 8, wherein said separating element comprises a mechanical separating element.

13. The container of claim 1, wherein the closure is pierceable by a needle and wherein the container further comprises blood introduced into the container through a needle.

14. A method of collecting blood comprising providing a container precoated with a mixture comprising thrombin and a polycarboxylic acid compound having a molecular weight of less than about 500 g/mol in a concentration sufficient to stabilize thrombin and adding to the container a blood sample.

15. The container of claim 14, wherein said polycarboxylic acid compound is selected from the group consisting of citrate or isocitrate.

16. The method of claim 14, wherein a concentration of said polycarboxylic acid compound ranges from about 0.5 mM to about 100 mM of concentrated formulation.