



Department of Health & Human Services  
Public Health Service  
National Institutes of Health

**Center for Human Immunology  
Autoimmunity and Inflammation**  
Building 15F2, MSC 2664  
Bethesda, Maryland 20892

## CHI Standard Operating Procedure for Serum Collection Using SST Tubes

### Blood collection and serum separation

Blood samples are collected by venipuncture into either 4ml, 8ml or 10ml Vacutainer SST tubes according to the manufacturers recommended protocol (BD).

**Note:** It is important to ensure that the full volume of blood for the relevant tube is collected so that the correct relative concentration of coagulant to blood is obtained.

Immediately after the blood is drawn each tube should be gently inverted eight to ten times to thoroughly mix the blood and clot activator. Allow blood to **clot for a minimum of 30 minutes** in a vertical position and observe to determine the presence of a dense clot.

**Centrifuge at FULL SPEED (between 1100 and 1300g) for 10 minutes in a swinghead centrifuge** (balance tubes in centrifuge). The gel barrier will form, separating the serum specimen from the clot.

Open the top and aliquot 500ul or 200ul of serum to pre-prepared barcode labeled 1.8ml cyro tubes. Snap freeze serum samples on dry ice and then transfer cryo tubes to LN2 for long-term storage.

Record location in LN2 tank.