Mercodia
Developing diagnostics

Technical Note No: 34-0146

Sample Collection for the Mercodia Glucagon ELISA

Sample types:

Serum or EDTA plasma can be used. However, glucagon in serum or EDTA plasma samples will be sensitive to storage conditions and freeze-thaw cycles.

- Avoid storing samples at room temperature or 2-8°C for longer than 2 hours.
- Store samples at -80°C.
- Avoid freeze-thaw cycles

EDTA plasma in BD p800 tubes.
Collecting samples in Becton Dickinson (BD) p800 tubes containing lyophilized protease inhibitors and DPP-IV inhibitors will yield (20 – 30%) higher glucagon values than EDTA plasma not collected in BD p800 tubes or serum. Samples from p800 tubes are stable for up to 6 hours at room temperature or 2-8°C, and up to 4 freeze-thaw cycles in cryo vials. Store samples at -80°C.

EDTA plasma with addition of aprotinin.
Addition of aprotinin to EDTA plasma samples will not improve sample stability. Samples will be sensitive to storage conditions and freeze-thaw cycles. Avoid storing samples at room temperature or 2-8°C for longer periods than 2 hours. Avoid freeze-thaw cycles. Store samples at -80°C.

Detailed recommendations for sample collection procedures:

General
The Project Manager or study protocol will dictate the venipuncture site and technique to be used.

Serum
Whole blood should be drawn into serum tubes and mixed pursuant to tube manufacturer specifications. We recommend a clotting time of no longer than 2 hours in 2-8°C. Serum should be spun at 1,303 x g for 20 minutes (or according to tube manufacturer specifications), in a refrigerated centrifuge (4°C), if possible.

Serum can be removed by aspiration, being sure to avoid red blood cell contamination. Aliquot samples into cryo vials suitable for storage at -80°C. Avoid freeze-thaw cycles. Thaw samples on ice prior to analysis in the Mercodia Glucagon ELISA. For transport of cryo vials, use dry ice.

Plasma (EDTA or BD p800 tubes)
Whole blood drawn into Vacutainer tubes with anticoagulants should be mixed pursuant to tube manufacturer specifications, allowed to sit at room temperature for 30 minutes, and spun to plasma at 1,303 x g for 20 minutes (or according to tube manufacturer specifications). If possible, use a refrigerated (4°C) centrifuge.

Plasma can be removed by aspiration, being sure to avoid red blood cell contamination. Aliquot in cryo vials suitable for storage at -80°C. If BD p800 tubes were used for collection, samples will be stable for up to four freeze-thaw cycles. Thaw samples on ice prior to analysis in the Mercodia Glucagon ELISA. For transport of cryo vials, use dry ice.