GLP-1 Measurement: From methodology to laboratory practice

- Active GLP-1 (7-36) ELISA
- Total GLP-1 ELISA
- GLP-1 Sample Extraction Kit
Specimen Collection

1. Use plasma collection tube with DPP IV inhibitor added.

   BD™ P700 blood collection tube

2. Collect EDTA-plasma and transfer plasma immediately into a tube with DPP IV inhibitor cocktail.

   Validation of DPP-IV inhibitor cocktail is required.
Specimen shipment and Storage

- Collected plasma with DPP IV inhibitor must be stored and shipped to laboratory at or below – 20°C.
Sample Extraction gives clinical meaningful GLP-1 test results

- Use GLP-1 Sample Extraction Kit, EPI-KT-910

A solid phase column extraction method. All reagents are provide and ready to use.

Studies have indicated that the plasma sample extraction is ubiquitous requirement.

Plasma matrix interferences GLP-1 quantification in immunoassay based methods. This matrix interference is able to significantly improved by adding a solid phase extraction prior to immunoassay quantification.

GLP-1 Assays

• **Active GLP-1 (7-36) ELISA, EPI-KT-871**

  It measures GLP-1 (7-36) without cross reaction to
  - GLP-1 (9-36), (7-37), (9-37), (1-36), (1-37)
  - GLP-2
  - Glucagon
  Assay sensitivity: 0.6 pmol/l

• **Total GLP-1 ELISA, EPI-KT-876**

  It measures the sum value of GLP-1 (7-36) and (9-36) without cross reaction to
  - GLP-1 (7-37), (9-37), (1-36), (1-37)
  - GLP-2
  - Glucagon
  Assay sensitivity: 1.0 pmol/l
GLP-1 Flow-Chart

Collect plasma with DPP IV inhibitor

Solid phase sample extraction

Active GLP-1 (7-36) Level

Total GLP-1 Level