F2-Isoprostane/Creatinine

CPT Code: 82542/82570

Order Code: C261

Includes: F₂-isoprostane, Urine Creatinine

ABN Requirement: No

Specimen: Preservative-free Urine

Volume: 2.0 mL

Minimum Volume: 1.5 mL

Container: Yellow Top Urine Tube (No Preservative)

Collection:

1. Collect urine sample in a preservative-free urine collection container (cup) according to standard protocols.

- 2. Transfer aliquot into a preservative-free urine specimen tube using the vacutainer transfer device included with the tube.
- 3. Label urine specimen tube according to standard protocols. Store and transport refrigerated. Discard urine collection container (cup).

Transport: Store urine at 2°C to 8°C after collection and ship the same day per packaging instructions included with the provided shipping box.

Stability:

Ambient (15-25°C): 7 days

Refrigerated (2-8°C): 14 days

Frozen (-20°C): 6 months

Causes for Rejection: Specimens other than preservative-free urine; improper

labeling; samples not stored properly; samples older than stability limits

Methodology: Liquid Chromatography, Tandem Mass Spectrometry (LC-MS/MS)

Turn Around Time: 5 days

Relative Risk Range:

Elevated urinary F_2 -Isoprostanes are associated with an increased risk of

coronary heart disease (CHD) (1). (Reference: 1-Schwedhelm et al. Circulation. 2004; 109: 843-848.)

Clinical Significance: The F₂-isoprostane/creatinine is the "gold standard" for measuring oxidative stress and has utility in individuals who have lifestyle risks due to poor diet or smoking, a family history of cardiovascular disease, or hyperlipidemia. High levels are seen in conditions associated with increased risk of atherosclerosis and certain cancers.

Limitations: Conditions that result in excessive generation of free radicals, including atherosclerosis, smoking and alcoholism, can result in increased levels of urinary isoprostanes.

Additional Information: The measurement of urinary isoprostanes is also used to assess efficacy of antioxidants in vivo.

The CPT codes provided are based on AMA guidelines and are for informational purposes only. CPT coding is the sole responsibility of the billing party. Please direct any questions regarding coding to the payer being billed.