

Protein Electrophoresis and Total Protein, Random Urine

CPT Code: 84156, 84166, 82570

Order Code: 8525

Test Includes: Protein, Total, Random Urine with Creatinine; Protein Electrophoresis

ABN Requirement: No

Synonyms: UPEP

Specimen: Random Urine

Volume: 25.0 mL

Minimum Volume: 15.0 mL

Container: Urine (Yellow Top, no preservative) tube

Collection:

1. Collect sample according to standard protocols.
2. Transfer aliquot from a clean urine cup into a Yellow Top tube using the vacutainer transfer device included with the Yellow Top tube.
3. Gently invert tube 5 times
4. Label sample according to standard protocols.

Special Information: First morning void is preferred.

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): 4 days

Refrigerated (2-8°C): 5 days

Frozen (-20°C): 30 days

Causes for Rejection: Specimens other than random urine; urine collected in acid container; improper labeling; samples not stored properly; samples older than stability limits; acidified urine

Methodology: Electrophoresis; Spectrophotometry

Turn Around Time: 3 to 7 days

Reference Range: See Laboratory Report

Clinical Significance: This test is used to analyze the protein content in urine. The proteins are separated into 5 major components: albumin, alpha-1, alpha-2, beta, and gamma. Interpretation of elevations, decreases, or visual changes in different components and/or associated patterns can provide information on various disease states, including inflammatory diseases, autoimmune diseases, different types of kidney injury, plasma cell disorders, and cancers.

UPEP is used to evaluate an individual with symptoms associated with potential monoclonal gammopathy, or when an individual has abnormally high total protein, albumin, or immunoglobulin levels. This test can help with initial diagnosis, as well as monitoring disease progression and treatment effectiveness.

NOTE: The results of this test should not be used in isolation; these results alone are not enough to make a diagnosis or for monitoring. UPEP results should be evaluated along with other laboratory, clinical, and imaging findings as appropriate. Additional testing, such as bone marrow studies, serum protein electrophoresis (SPEP), and immunofixation (IFE), may be required for comprehensive evaluation.

References

1. National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology. Multiple myeloma. Version 2.2020; October 9, 2019. <https://www.nccn.org>
2. Rajkumar SV, et al. *Lancet Oncol*. 2014;15:e538-e548.

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.