
Lab Dept: Urine/Stool

Test Name: POTASSIUM, URINE

General Information

Lab Order Codes: UKR

Synonyms: K, Random Urine

CPT Codes: 84133 – Potassium; urine

Test Includes: Urine potassium concentration in mmol/L.

Logistics

Test Indications: Potassium is the major intracellular cation and is useful for evaluating renal function in urine samples. Determining the cause of hyper or hypocalcemia.

Lab Testing Sections: Chemistry - Sendouts

Referred to: Mayo Clinic Laboratories (Mayo test: RKUR)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1-2 days

Special Instructions: N/A

Specimen

Specimen Type: Urine, random collection

Container: Plastic leakproof container (No preservatives)

Draw Volume: 1 - 4 mL from a random urine collection

Processed Volume: Minimum: 1 mL urine

Collection:	A random urine sample may be obtained by voiding into a urine cup and is often performed at the laboratory. Bring the refrigerated container to the lab. Make sure all specimens submitted to the laboratory are properly labeled with the patient's name, medical record number and date of birth.
Special Processing:	Lab Staff: Mix sample well before removing a 1-4 mL aliquot into a Mayo Supply T465 urine tube. Store and ship refrigerated.
Patient Preparation:	None
Sample Rejection:	Mislabeled or unlabeled specimens

Interpretive

Reference Range:	No reference ranges established for random urine samples Interpretation: Hypokalemia reflecting true total body deficits of Potassium (K+) can be classified into renal and nonrenal losses based on the daily excretion of K+ in urine. During hypokalemia, if urine excretion of K+ is less than 30 mEq/d, it can be concluded that renal reabsorption of K+ is appropriate. In this situation, the causes for hypokalemic state are either decrease K+ intake or extra renal loss of K+ rich fluid. Urine excretion of more than 30 mEq/d in a hypokalemia setting is inappropriate and indicates the kidney are the primary source of the lost K+.
Critical Values:	N/A
Limitations:	Ion-selective electrodes are selective for the ion in question but are not absolutely specific. Other monovalent cations may interfere but not in the physiologic range.
Methodology:	Integrated Multisensor Technology
References:	Tietz (1999) Clinical Guide to Laboratory Tests, 3 rd ed, Philadelphia, WB Saunders Company, p 1830 Dimension Integrated Multisensor Insert P/N 717500.003 Rev. L 9/10/2009 Mayo Clinic Laboratories (October 2020)
Updates:	9/28/2017: Updated lab processing. 10/28/2020: Testing moved to Mayo Clinic Laboratories