
Lab Dept: Chemistry

Test Name: POTASSIUM (K), PUMP

General Information

Lab Order Codes: KP

Synonyms: K

CPT Codes: 84132 – Potassium; serum, plasma or whole blood

Test Includes: Potassium concentration reported in mEq/L.

Logistics

Test Indications: Useful in determining the potassium concentration of the pump prime solution prior to certain procedures such as ECMO or heart surgery.

Lab Testing Sections: Chemistry

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 30 minutes

Special Instructions: [See Collection](#)

Specimen

Specimen Type: Whole blood, pump

Container: Green top (Li Heparin) **preferred**
Alternate tube: Red top (plain, no gel) tube

Draw Volume: 0.6 mL blood

Processed Volume: 0.2 mL blood

Collection: The specimen is collected from the ECMO pump.

Draw in an electrolyte-balanced heparin blood gas syringe. Immediately remove all air from syringe, remove needle, cap tightly, and mix. Send specimen in original tube. Forward promptly at ambient temperature

only. Do not expose the specimen to air.

Special Processing: Lab Staff: Centrifuge specimen within 1 hour of collection, and remove serum/plasma aliquot into a plastic sample cup. Store at refrigerated temperatures.

Patient Preparation: None

Sample Rejection: Mislabeled or unlabeled specimen; clotted specimen

Interpretive

Reference Range: Reference ranges have not been established for pump samples.

Critical Values: <2.5 mEq/L or >6.5 mEq/L

Limitations: Hemolysis of the sample will yield falsely increased potassium results.
Samples exposed to benzylonium salts, present in certain blood catheter devices, will cause falsely increased potassium levels.

Methodology: Integrated Multisensor Technology

References: QuikLYTE® Integrated Multisensor insert sheet (2009-09-10) PN 717500.003 - US

Dimension RxL MAX Operator's Guide (05/2003)

Tietz Textbook of Clinical Chemistry 3rd Edition (1999) W.B. Saunders Company

Clinical Significance Dade Behring Inc., Glasgow Business Community, Mailbox 531, P.O. Box 6101, Newark, Delaware 19714

Jacobs & DeMott Laboratory Test Handbook (2001) Lexi-Comp, Inc, Hudson, OH, 5th Edition

Updates: 2/17/2005: Lower end Critical Value previously listed as <3.0 mEq/L.
8/13/2009: Turnaround time previously listed as 2 hours.