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**Lab Dept:** Chemistry

**Test Name:** POTASSIUM (K), PUMP

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***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.

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***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](#)

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***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

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***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.