

---

**Lab Dept:** Chemistry

**Test Name:** IONIZED CALCIUM, PUMP

---

***General Information***

**Lab Order Codes:** PICA

**Synonyms:** Calcium, Ionized, Blood, ICa

**CPT Codes:** 82330 – Calcium; ionized

**Test Includes:** Ionized calcium reported in mEq/L.

---

***Logistics***

**Test Indications:** Useful for determining the ionized calcium 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:** For use by ECMO/heart surgery only. Specimen may be tested at the bedside by POCT, or forward promptly to the lab at ambient temperature.

---

***Specimen***

**Specimen Type:** Whole blood

**Container:** **Preferred:** Sims Portex® syringe (PB151) or Smooth-E syringe (956-463)

**Draw Volume:** 0.4 mL blood

**Processed Volume:** 0.2 mL blood

<b>Collection:</b>	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. <b>Do not expose the specimen to air.</b>
<b>Special Processing:</b>	Lab Staff: <b>Do not</b> centrifuge. Specimen should be delivered to blood gas workstation for analysis and analyzed within 2 hours of collection.
<b>Patient Preparation:</b>	None
<b>Sample Rejection:</b>	Clotted specimen; mislabeled or unlabeled specimens; sample containing air; specimens older than 2 hours

---

### ***Interpretive***

<b>Reference Range:</b>	Undetermined
<b>Critical Values:</b>	N/A
<b>Limitations:</b>	N/A
<b>Methodology:</b>	Ion-Selective Electrode (ISE)
<b>Contraindications:</b>	This test is not indicated for evaluation of patient ionized calcium.
<b>References:</b>	ABL90 Operator's Manual Publication 201403 from software version 3.1xx, Code 995-656
<b>Updates:</b>	10/13/2014: Stability on ice changed from 30 minutes to 2 hours.