

CALCIUM -IONIZED, WHOLE BLOOD

Orderable - CAIBLD

Turnaround Time: 60 minutes

Alternate Name(s):

Ionized Calcium

Specimen:



Laboratory:
Core Lab



Requisition:
GENERAL LABORATORY
REQUISITION



Method of Analysis:
Ion Selective Electrodes
(potentiometric sensors)



Test Schedule:
As required

Preferred:
3mL Electrolyte Balanced Heparin Blood Gas Syringe
Alternate Acceptable or Referred in Samples:
4mL Dark Green (Lithium or Sodium Heparin) Vacutainer or 4.5mL (Lithium Heparin) Vacutainer
Pediatric Only:
If unable to collect above venous or arterial samples, lithium heparin capillary samples will be accepted.

Collection Information:

- DO NOT USE A TOURNIQUET WHEN COLLECTING A SPECIMEN FOR IONIZED CALCIUM.
- Do NOT open the cap until ready to analyze.
- Samples that are clotted, have insufficient volume or are leaking will be cancelled.
- Minimum Fill Volume:
 - Syringe: Must be at least half full (1.5mL)
 - Vacutainer: Must be completely filled (4mL or 4.5mL)
 - Capillary: Must be completely filled (170µL)

Pediatric Requirements:

Capillary specimens are to be drawn on pediatric patients only when a venous or arterial specimen is not an option. Collect directly into a capillary tube and not a microtainer.

Plastic capillary tube, completely filled, lithium heparin balanced, mixing wire (flea) caps, magnet.

- When done collecting blood, apply caps tightly to both ends of the capillary tube

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- Gently mix blood with metal flea by running magnet up and down the full length of the tube multiple times to prevent clotting
- Samples must be sent to the lab on ice with no bubbles.

Reference Ranges:

	Age	Reference Interval
Ionized Calcium	0-<7d	1.02 - 1.45 mmol/L
	7d-<6m	1.21 - 1.44 mmol/L
	6m-<2y	1.14 - 1.37 mmol/L
	2-18y	1.10 - 1.33 mmol/L
	≥19y	1.09 - 1.30 mmol/L

Storage and Shipment:

- Send all specimens to the core laboratory at room temperature within 30 minutes
- Store on ice slurry if delay in analysis or delivery longer than 30 minutes
- Do not freeze

Referred in Specimens Only:

Completely filled vacutainer specimens are suitable for testing up to 8 hours after collection. Specimen must NOT be exposed to air prior to collection. Please keep the specimen anaerobic and do not aliquot. The sample should be refrigerated and sent refrigerated (on cold packs) to LHSC for analysis.