

CALCIUM -IONIZED, WHOLE BLOOD

Orderable - CAIBLD

Turnaround Time: 60 minutes

Alternate Name(s):

Ionized Calcium

Specimen:

Preferred:
1 mL or 3 mL Electrolyte Balanced Heparin Blood Gas Syringe
Alternate Acceptable or Referred in Samples:
Full 4mL Dark Green (Lithium or Sodium Heparin) Vacutainer or 4.5mL (Lithium Heparin) Vacutainer
Pediatric Only:
Electrolyte-balanced heparin 1 mL blood gas syringe or capillary tube.



Laboratory:
Core Lab



Requisition:
GENERAL LABORATORY
REQUISITION



Method of Analysis:
Ion Selective Electrodes
(potentiometric sensors)




Test Schedule:
As required

Collection Information:

- Use tourniquet to isolate vein, release tourniquet for 30 seconds, then collect blood for ionized calcium
- Specimens MUST be kept capped and air tight until analysis
- Samples that are clotted, have insufficient volume or are leaking will be cancelled.
- Minimum Fill Volume:
 - Syringe: Must be at least half full
 - Vacutainer: Must be full
 - Capillary: Must be full

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 ensure the magnetic flea and end caps are applied with no bubbles. Gently mix the capillary tube by running the magnet up and down the full length of the tube.



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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 immediately to the core laboratory at room temperature
- Send on ice slurry if delay in analysis will be longer than 30 minutes
- Do not freeze

Referred in Specimens Only:

Completely filled and air tight vacutainer specimens are suitable for testing up to 8 hours after collection. The sample should be sent at 2-8° to LHSC for analysis, as soon as possible.