

CALC - CALCIUM, *Continued*

Specimen Storage and Stability

1. Tubes of blood are to be kept closed at all times and in a vertical position. It is recommended that the serum or plasma be physically separated from contact with cells within two hours from the time of collections.
2. For accurate results, serum and plasma specimens should be free of fibrin, red blood cells, and other particulate matter. Serum specimens from patients receiving anticoagulant or thrombolytic therapy may contain fibrin due to incomplete clot formation. For accurate results, plasma specimens should be free of platelets and other particulate matter. Ensure centrifugation is adequate to remove platelets. Specimens should be free of bubbles
3. Prepare frozen specimens as follows:
 - Frozen specimens must be completely thawed before mixing.
 - Mix thawed specimens thoroughly
 - Visually inspect the specimens. If layering or stratification is observed, mix until specimens are visibly homogeneous.
 - If specimens are not mixed thoroughly, inconsistent results may be obtained.

Specimen Type	Temperature	Maximum Storage Time
Serum/ Plasma	20 to 25°C	7 days
	2 to 8°C	3 weeks
	-20°C	8 months

Sample Dilution Procedures

Serum/Plasma
 Samples with calcium values exceeding 24 mg/dL. are flagged with the code "> 24.0 mg/dL" (6.00 mmol/L) and may be diluted with either the Automated Dilution Protocol or the Manual Dilution Procedure.

Automated Dilution Protocol

Serum/Plasma
 If using an automated dilution protocol, the system performs a dilution of the sample and automatically calculates the concentration by multiplying the result by the dilution factor.

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Manual	Dilution	Procedure
Dilute the sample with saline (0.85% to 0.90% NaCl). The operator must enter the dilution factor in the Specimen or Control tab of the Create Order screen. The system will use this dilution factor to automatically calculate the concentration of the sample and report the result.		

Reagent

Reagent Preparation

- Upon receipt, place reagent cartridges in an upright position for 8 hours before use to allow bubbles that may have formed to dissipate.
- If a reagent cartridge is dropped, place in an upright position for 8 hours before use to allow bubbles that may have formed to dissipate.
- Do not invert reagent cartridges prior to use.
- Reagents are susceptible to the formation of foam and bubbles. Bubbles may interfere with the detection of the reagent level in the cartridge and cause insufficient reagent aspiration that may adversely affect results

	Storage Temperature	Maximum Storage Time	Additional Storage Instructions
Unopened	15 to 30°C	Until expiration date	Store in upright position
Onboard	System Temperature	30 days	
Opened	2 to 8°C	Until expiration date	Store in upright position. Do not reuse original reagent caps or replacement caps due to the risk of contamination and the potential to compromise reagent performance.

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Calibration

Calibration Required

For instructions on performing a calibration, refer to the Alinity ci-series Operations Manual, Section 5. Calibration is stable for approximately 30 days (720 hours), but is required with each change in reagent cartridge or lot. Verify calibration with at least 2 levels of controls according to the established quality control requirements for your laboratory. If control results fall outside acceptable ranges, recalibration may be necessary. This assay may require recalibration after maintenance to critical parts or subsystems or after service procedures have been performed.

Calibration Preparation

Calibration material is 08P6001 Alinity c Multiconstituent Calibrator Kit. This product is liquid ready-to-use. Prior to each use, mix by gentle inversion.

Calibration Storage and Stability

	Calibrator Storage	Stability Once OPEN
MC Cal (CAL 1 and CAL 2)	Unopened: 2 to 8 (until expiration date)	2 to 8°C: 7 days 15 to 30°C: 24 hours Onboard: 5 days

1. Calibrator values may be configured using e-files accessed and imported from www.corelaboratory.abbott, or from Abbott Mail.

Calibration Information

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2. Verify that the correct calibrator values have been entered into the calibration file.
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3. Calibration is performed by running a water blank and Alinity c Multiconstituent Calibrator Kit. Water for the blank is provided by the instrument.
3. Calibration is performed by running a water blank and Alinity c Multiconstituent Calibrator Kit. Water for the blank is provided by the instrument.
4. For information on configuring calibrator data, refer to the Alinity ci-series Operations Manual, Section 2.
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Quality Control

See Policy [Chemistry Quality Control Policy](#)

Sample Processing

See Policy [RIV-PPP-1199](#)

Test unit=mg/dL for all ages and both sexes

Reference Range

Age Day Low	Age Day High	Age Year Low	Age year High	Ref Low	Ref High
0	10			7.6	10.4
10			2	9	11
		2	12	8.8	10.8
		12	250	8.4	10.2

Analytic Range

AMR Low	AMR High	CRR Low	CRR High
2	24	2	24

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