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**Lab Dept:** Chemistry

**Test Name:** **CALCITONIN, SERUM**

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***General Information***

**Lab Order Codes:** CALT

**Synonyms:** Thyrocalcitonin

**CPT Codes:** 82308 - Calcitonin

**Test Includes:** Calcitonin level reported in pg/mL.

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***Logistics***

**Test Indications:** Diagnosis and follow-up of medullary thyroid carcinoma (MTC). Adjunct to diagnosis of multiple endocrine neoplasia type II (MENII) and familial medullary thyroid carcinoma (FMTC). Occasionally useful in the diagnosis and follow-up of islet cell tumors.

**Lab Testing Sections:** Chemistry - Sendouts

**Referred to:** Mayo Medical Laboratories (MML Test: CATN)

**Phone Numbers:** MIN Lab: 612-813-6280

STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 1 – 3 days, test set up Monday - Saturday

**Special Instructions:** See [Patient Preparation](#)

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***Specimen***

**Specimen Type:** Blood

**Container:** SST (Gold, marble or red) tube ON ICE or refrigerate until centrifugation

**Draw Volume:** 2.4 mL (Minimum: 1.2 mL) blood

**Processed Volume:** 0.8 mL (Minimum: 0.4 mL) serum

**Collection:** Routine venipuncture, place specimen on ice and send to lab.  
Or refrigerate specimen until centrifugation.

**Special Processing:** Lab Staff: Centrifuge specimen, remove serum aliquot into a plastic screw-capped plastic vial. Store and ship at frozen temperatures.  
Forward promptly.

**Patient Preparation:** 12 hours before this blood test, patient should not take multivitamins or dietary supplements containing biotin or vitamin B7, which are commonly found in hair, skin and nail supplements and multivitamins.

**Sample Rejection:** Warm specimens; mislabeled specimens or unlabeled specimens

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***Interpretive***

**Reference Range:**

<b>Age</b>	<b>Range (pg/mL)</b>
1 month	< or =34
2 months	< or =31
3 months	< or =28
4 months	< or =26
5 months	< or =24
6 months	< or =22
7 months	< or =20
8 months	< or =19
9 months	< or =17
10 months	< or =16
11 months	< or =15
12-14 months	< or =14
15-17 months	< or =12
18-20 months	< or =10
21-23 months	< or =9

2 years	< or =8
3-9 years	< or =7
10-15 years	< or =6
16 years	< or =5
<b>Adults (17 years or older)</b>	
Males	< or =14.3
Females	< or =7.6

**Critical Values:** N/A

**Limitations:** Not useful in evaluating calcium metabolic diseases.

Samples should not be taken from patients receiving therapy with biotin or vitamin B7 doses (ie, >5 mg/day) until at least 12 hours following the last biotin administration.

Falsely elevated values may occur in serum from patients who have developed human antimouse antibodies (HAMA) or heterophilic antibodies.

In rare cases, interference due to extremely high titers of antibodies to analyte-specific antibodies, streptavidin, or ruthenium can occur.

Values obtained with different assay methods or kits may be different and cannot be used interchangeably. Test results cannot be interpreted as absolute evidence for the presence or absence of malignant disease.

**Methodology:** Electronchemiluminescence Immunoassay by Roche Cobas

**References:** [Mayo Medical Laboratories Web Page](#) December 2017

**Updates:**  
3/14/2004: Test moved from Esoterix to Mayo Medical Laboratories.  
6/13/2005: Method changed from ICMA by Nichols Diagnostics to ICMA by Diagnostics Products Corporation Immulite 2000  
12/13/2017: Updated collection container, method and ref ranges.