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**Lab Dept:** Chemistry

**Test Name:** PTH, INTACT (WITH CALCIUM)

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***General Information***

**Lab Order Codes:** PTHB

**Synonyms:** Parathyroid Hormone, Intact

**CPT Codes:** 83970 – Parathormone (parathyroid hormone)  
82310 – Calcium, total

**Test Includes:** PTH intact (pg/mL) and total calcium (mg/dL)

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***Logistics***

**Test Indications:** N/A

**Lab Testing Sections:** Chemistry – Performed at Minneapolis Campus

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

STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** Performed daily

**Special Instructions:** N/A

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***Specimen***

**Specimen Type:** Blood

**Container:** Green (LiHep) NO GEL tube, preferred  
Alternate tubes: Green (NaHep) NO GEL, Red NO GEL

**Note:** Heparinized specimens cannot be sent out for backup testing.

**Draw Volume:** 2.1 mL (Minimum: 1.2 mL) blood

**Processed Volume:** 0.7 mL (Minimum: 0.4 mL) serum/plasma  
**Note:** Use of the minimum volume does not allow repeat analysis

**Collection:** Routine blood collection

**Special Processing:** Lab Staff: Centrifuge immediately within 20 minutes of collection.

Serum or plasma should be physically separated from cells as soon as possible with a maximum limit of two hours from the time of collection.

Do not leave blood at ambient temperature. Store and ship at frozen temperatures. Forward promptly.

**Patient Preparation:** None

**Sample Rejection:** Mislabeled or unlabeled specimens; specimens collected in gel tubes; gross hemolysis; anticoagulants other than listed

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***Interpretive***

**Reference Range:**

<b>Age:</b>	<b>Range (pg/mL)</b>
Birth – <1 year:	6 – 88 pg/mL
1 – <9 years:	15 – 65 pg/mL
9 – <17 years:	22 – 88 pg/mL
>17 years:	15 – 65 pg/mL
For Calcium: See <a href="https://www.childrensmn.org/References/Lab/chemistry/calcium.pdf">https://www.childrensmn.org/References/Lab/chemistry/calcium.pdf</a>	

**Critical Values:** N/A

**Limitations:** May not be comparable to other methods or manufacturers.

Specimens left at ambient temperature or not separated within 2 hours of draw may affect results.

PTH is relatively unstable. Avoid multiple tube to tube transfers.

**Methodology:** PTH: Chemiluminescence Microparticle Immunoassay, Abbott Diagnostics  
Calcium: O-cresolphthaline

**References:**

Abbott Architect Intact PTH reagent cartridge insert sheet. Abbott Laboratories, Abbott Park IL 60064. Revised January 2016

Abbott Architect Intact PTH calibrator insert sheet. Abbott Laboratories, Abbott Park IL 60064. Revised November 2015

Abbott Architect Safety Data Sheet, Abbott Diagnostics, Abbott Park IL 60064. Revised April 9, 2016

Biorad Lyphochek Specialty Immunoassay Control Product Insert, Bio-Rad Laboratories, Irvine CA 92618. January 2018

Caliper Paediatric Reference Interval, The Hospital for SICK Childrens, Toronto, Ontario, Canada

**Updates:**

8/13/15: Specimen requirement changes.

4/3/17: Updated specimen processing.

4/17/18: Testing moved from Esoterix to inhouse at Children's.

5/1/18: Collection container and processing instruction update.

4/22/19: Added EDTA specimen type as alternate.

4/25/22: Updated acceptable containers