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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:** Red NO GEL  
Alternate: Green (LiHep) NO GEL, Lavender (EDTA)  
**Note:** Heparinized or EDTA 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.

Transfer aliquots into two screw-capped round bottom plastic vials. One for the Vista and one for the Architect.

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

Minimum sample volume requires sample to be aliquoted into an Architect sample cup and placed atop a barcoded sendout tube. Label the Architect cup with a foot label.

**Patient Preparation:** None

**Sample Rejection:** Specimens other than serum; mislabeled or unlabeled specimens; specimens collected in gel tubes; gross hemolysis

***Interpretive***

**Reference Range:**

Age:	Range (pg/mL)
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:** 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 Immunoassay  
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.