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**Lab Dept:** Chemistry

**Test Name:** INTRA-OPERATIVE PTH, RAPID INTACT

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***General Information***

**Lab Order Codes:** IPTHC

**Synonyms:** PTH, Rapid; PTH, Intact; PTH; Parathyroid Hormone

**CPT Codes:** 83970 – Assay of parathormone (PTH)

**Test Includes:** Parathyroid Hormone test reported in pg/mL

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***Logistics***

**Test Indications:** Rapid measurement of PTH levels is now frequently used intra-operatively to confirm that an adenoma has been successfully removed; this technique is used particularly during less invasive procedures involving limited neck exploration after pre-operative localization of the putative adenoma. Currently, most available rapid intra-operative assays are intact PTH assays measuring both PTH(1-84) and PTH(7-84)

**Lab Testing Sections:** Chemistry - Minneapolis Campus

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

STP Lab: 651-220-6550

**Test Availability:** Daily, call lab the morning of the procedure to inform Minneapolis Lab

**Turnaround Time:** 40 minutes upon receipt in lab

**Special Instructions:** Only available at Children's Hospital, Minneapolis Campus. Please call lab the morning of the procedure to notify Lab of the need for Intraoperative STAT testing.

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***Specimen***

**Specimen Type:** Blood

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

**Note:** Red NO GEL tubes are also acceptable per method, however will cause significant delay. Collection of serum specimens is strongly discouraged, but will not be rejected.

**Draw Volume:** 1.5 mL (Minimum 0.6 mL) blood

**Processed Volume:** 0.5 mL (Minimum: 0.2 mL) plasma

Note: Submission of the minimum volume does not allow for repeat testing.

**Collection:** Collected in surgery by surgical staff and brought immediately to the Minneapolis Main Laboratory (See [Special Instructions](#))

**Special Processing:** **OR Staff:**

1. Include a phone number on the requisition for the lab tech to call results, if required.

2. Ensure specimen is properly labeled.

3. Deliver immediately to the Minneapolis Main Laboratory and notify them of the need for STAT processing.

**Lab Staff:**

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

Run specimen STAT and call results via phone number provided if requested.

**Patient Preparation:** N/A

**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 – 665 pg/mL
9 – <17 years:	22 – 88 pg/mL
>17 years:	15 – 65 pg/mL

**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:**

Chemiluminescence Microparticle Immunoassay, Abbott Diagnostics

**References:**

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

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

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

Abbott Alinity i Intact PTH Reagent Kit Instructions for Use, Abbott Laboratories Diagnostics Division, Abbott Park, IL, 60064, USA. March 2018

Abbott Alinity i Intact PTH Calibrator Kit Instructions for Use, Abbott Laboratories Diagnostics Division, Abbott Park, IL, 60064, USA. March 2018

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:**

5/1/2018: Collection container changed from Red NO GEL to Lavender EDTA.

12/7/2020: Updated for method Abbott Alinity.

4/25.2022: Updated collection containers