
Lab Dept: Chemistry

Test Name: PROINSULIN, PLASMA

General Information

Lab Order Codes: PROIN

Synonyms: Insulinoma

CPT Codes: 84206 - Proinsulin

Test Includes: Proinsulin level reported in pmol/L.

Logistics

Test Indications: As part of the diagnostic workup of suspected insulinoma, PC1/3 deficiency, or with suspected proinsulin mutations.

Lab Testing Sections: Chemistry - Sendouts

Referred to: Mayo Medical Laboratories (MML Test: PINS)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 2 – 7 days, performed Monday and Thursday

Special Instructions: See [special container](#), [collection procedure](#) and [patient preparation](#).

Specimen

Specimen Type: Blood

Container: Ice cooled Lavender top (EDTA) tube

Draw Volume: 4.5 mL (Minimum: 3 mL) blood

Processed Volume: 1.5 mL (Minimum: 1 mL) plasma

Collection: Routine blood collection. Draw blood into an ice cooled lavender top tube from a fasting patient. After draw, chill the whole blood on ice for at least 10 minutes before processing.

Special Processing: Lab Staff: Centrifuge specimen after the specimen has been on ice for at least 10 minutes in a refrigerated centrifuge. Remove plasma into a screw-capped plastic vial. Store and ship and frozen temperatures.

Patient Preparation: Fasting specimen preferred

Sample Rejection: Gross hemolysis; mislabeled or unlabeled specimens

Interpretive

Reference Range: 3 – 20 pmol/L

Critical Values: N/A

Limitations: To avoid misdiagnosis, all proinsulin measurements used in the diagnostic workup of patients with hypoglycemia must be interpreted in the context of coexisting illnesses, the blood glucose concentration at the time of sampling, and other test results (ie, insulin, C-peptide, beta-hydroxybutyrate, and sulfonylurea drug screen). For example, patients with chronic renal failure or type 2 diabetes mellitus can have increased proinsulin, C-peptide and insulin values, but usually without suppressed (<45 g/dL) blood glucose.

Methodology: Immunochemiluminescent Assay

References: [Mayo Medical Laboratories](#) February 2018