

TEST CHANGE

Proinsulin, Intact/Insulin Ratio

0070256, PRO INS

Specimen Requirements:

Patient Preparation: Patient must be fasting for 12-15 hours prior to collection.

Collect: Serum ~~separator tube~~ **Separator Tube** (SST).

Specimen Preparation: Separate from cells ASAP or within 2 hours of collection. Transfer 1 mL serum to an ARUP ~~standard transport tube~~ **Standard Transport Tube** and freeze immediately. (Min: 0.8 mL)

Transport Temperature: CRITICAL FROZEN. Separate specimens must be submitted when multiple tests are ordered.

Unacceptable Conditions: Heparinized plasma. Vitreous or I.V. fluids. Hemolyzed specimens.

Remarks:

Stability: After separation from cells: Ambient: Unacceptable; Refrigerated: ~~24~~ **48** hours; Frozen: 2 months (avoid repeated freeze/thaw cycles)

Methodology: Quantitative Chemiluminescent Immunoassay ~~(CLIA)~~ **Quantitative Chemiluminescent Immunoassay (CLIA)**

Performed: Tue, Thu

Reported: 1-6 days

Note:

CPT Codes: 84206; 83525

New York DOH Approval Status: This test is New York DOH approved.

Interpretive Data:

Insulin, ~~f~~ **F**asting: This test reacts on a nearly equimolar basis with the analogs insulin aspart, insulin glargine, and insulin lispro. Insulin detemir exhibits approximately 50 percent cross-reactivity. Test reactivity with insulin glulisine is negligible (less than 3 percent). To convert to pmol/L, multiply ~~by 6.0.~~ **μIU/mL by 6.0.**

~~Proinsulin, Intact: Fasting intact proinsulin values above the reference interval indicate a possible insulin secreting pancreatic tumor (insulinoma) in patients with hypoglycemia. Fasting intact proinsulin values range from 3 to 50 pmol/L in patients with untreated type 2 diabetes.~~

Reference Interval:

Test Number	Components	Reference Interval		
	Insulin, Fasting	3-25 μ IU/mL		
	Proinsulin, Intact			
		Age	pmol/L	
		0-17 year	Not established	
		18 years and older	Less than or equal to 8.0	
	Proinsulin, Intact/Insulin Ratio Calc			
		Age	Ratio (%)	
		0-17 years	Not established	
		18 years and older	0.8-21.7	