

Test Definition: FGHTP

Ghrelin Total (Plasma)

Overview

Method Name

Direct Enzyme Immunoassay (EIA)

NY State Available

No

Specimen

Specimen Type

GI Plasma

Shipping Instructions

Ship Frozen

Specimen Required

Patient Preparation:

- 1. Patient should be fasting 10 to 12 hours prior to collection of specimen.
- 2. Patient should not be on any medications or supplements that may influence Cholecystokinin (CCK), Glucose, Growth Hormone, Insulin and/or Somatostatin levels, if possible, for at least 48 hours prior to specimen collection.

Supplies: Special ISI GI preservative plasma tube T125

Container/Tube:

Collection: Special ISI GI preservative plasma tube (T125).

Submission Container/Tube: Plastic vial

Specimen Volume: 3 to 5 mL **Collection Instructions:**

- 1. Draw 10 mL of blood in special ISI GI preservative plasma tube (T125).
- 2. Centrifuge specimen in refrigerated centrifuge as soon as possible.
- 3. Send 3 to 5 mL plasma frozen.

Specimen Minimum Volume

1 mL

Reject Due To

| Gross | Reject |
|---------------|--------|
| hemolysis | |
| Gross lipemia | Reject |
| Gross icterus | Reject |
| Specimens | Reject |



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| other than |
|-----------------|
| collected in GI |
| Tube supply |
| (T125) |

Specimen Stability Information

| Specimen Type | Temperature | Time | Special Container |
|---------------|-------------|----------|-------------------|
| GI Plasma | Frozen | 180 days | |

Clinical & Interpretive

Clinical Information

Ghrelin is a novel 28 amino acid peptide derived by post-translational processes from a preproghrelin consisting of 117 residues, secreted by the stomach with specific receptors in the brain involved in appetite regulation. It conveys information to the brain thereby increasing appetite, food intake and body weight and influences the release of growth hormone. Ghrelin is a growth hormone-releasing peptide which acts as an endogenous ligand of the growth hormone secretagogue receptors (GHS-Rs). Ghrelin levels are inversely correlated with body weight and are higher during weight loss.

Reference Values

Normal weight/control subjects: 520-700 pg/mL

Obese subjects prior to diet: 340-450 pg/mL

8:00 am-12:00 pm: Up to 420 pg/mL

6:00pm: Up to 480 pg/mL

Obese subjects post induced Weight loss: 450-600 pg/mL

8:00 am-12:00 pm: Up to 575 pg/mL

6:00 pm: Up to 600 pg/mL

Obese subjects post gastric-bypass surgery: Up to 120 pg/mL

Cautions

The reference interval has been established using the ISI preservative indicated for this test. No other sample types are acceptable.

Clinical Reference

- 1. Shiiya T, Nakazato M, Mizuta M, et al. Plasma ghrelin levels in lean and obese humans and the effect of glucose on ghrelin secretion. J Clin Endocrinol Metab. 2002;87(1):240-244. doi:10.1210/jcem.87.1.8129
- 2. Cummings DE, Weigle DS, Frayo RS, et al. Plasma ghrelin levels after diet-induced weight loss or gastric bypass surgery. N Engl J Med. 2002;346(21):1623-1630. doi:10.1056/NEJMoa012908



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Performance

PDF Report

Referral

Day(s) Performed

Monday through Friday

Report Available

5 to 9 days

Performing Laboratory Location

Inter Science Institute

Fees & Codes

Fees

- Authorized users can sign in to <u>Test Prices</u> for detailed fee information.
- Clients without access to Test Prices can contact <u>Customer Service</u> 24 hours a day, seven days a week.
- Prospective clients should contact their account representative. For assistance, contact <u>Customer Service</u>.

Test Classification

This test has not been cleared or approved by the US Food and Drug Administration.

This test was developed and its performance characteristics determined by Inter Science Institute. Values obtained with different methods, laboratories, or kits cannot be used interchangeably with the results on this report. The results cannot be interpreted as absolute evidence of the presences or absence of malignant disease.

CPT Code Information

83520

LOINC® Information

| Test ID | Test Order Name | Order LOINC® Value |
|---------|-----------------|--------------------|
| FGHTP | Ghrelin Total | 76474-6 |
| | | |

| Result ID | Test Result Name | Result LOINC® Value |
|-----------|------------------|---------------------|
| FGHTP | Ghrelin Total | 76474-6 |