



**Memo No.** 2018-025  
**Date:** 29-Jun-2018  
**Memo To:** Clients  
**Re:** Test Revision – Glucagon

---

Please note the test site has been revised effective immediately to Mayo Medical Laboratories.

The change is required due to an unexpected notification from the previous lab that the method has been revised. Unfortunately, the method requirement to freeze and handle specimens at -80°C or colder are incompatible with offering a routine reference testing service for Glucagon. The method and specimen handling instructions for the new selected supplier lab (Mayo Medical Laboratories) are satisfactory for our clients needs.

Big plasma glucagon (BPG), considered to be biologically inactive, is extracted using ethanol prior to assay of the specimen. This enables accurate measurement of the biologically active glucagon in the specimen.

**Method:** Immunoassay following extraction **TAT:** 10 Days

**Specimen:** 2 mL Plasma (EDTA) Lavender top. Minimum 0.45 mL

Collect fasting specimen. Pre-chill tube at 4°C before drawing the specimen. Draw into the pre-chilled tube, and then chill tube in wet ice for 10 minutes. Centrifuge in a refrigerated centrifuge or in chilled centrifuge cup. Immediately after centrifugation, remove plasma, place in a plastic transport vial and freeze.

**Stability:** Frozen 90 Days

**Reference Values:** < or =6 hours: 100-650 pg/mL  
1-2 days: 70-450 pg/mL  
2-4 days: 100-650 pg/mL  
4-14 days: declining gradually to adult levels  
>14 days: < or =80 pg/mL (range based on 95% confidence limits)

Glucagon levels are inversely related to blood glucose levels at all ages. This is particularly pronounced at birth and shortly thereafter, until regular feeding patterns are established. This explains the higher levels immediately after birth, which then first fall as the glucagon release mobilizes the infant's glucose stores, then rise again as stores are depleted, finally normalizing towards adult levels as regular feeding patterns are established.

---

If you have further questions, please contact Client Care at (416) 422-3000 Ext. 300 or [info@ICLabs.ca](mailto:info@ICLabs.ca) or you may contact me directly.

Shashank Tilak PhD, DCC  
Laboratory & Scientific Director  
(416) 422-3000 Ext. 221  
[ShashTilak@ICLabs.ca](mailto:ShashTilak@ICLabs.ca)

**Want to receive updates by e-mail? Please contact Client Care [info@ICLabs.ca](mailto:info@ICLabs.ca)**

*ICL is the only Not-For-Profit dedicated broker of lab diagnostic tests in Canada*

57 Gervais Drive, North York, ON M3C 1Z2

(416) 422-3000 Ext. 300 [info@ICLabs.ca](mailto:info@ICLabs.ca)