

HGH (Human Growth Hormone)

Analyte: Human Growth Hormone

Specimen Type: Serum, Inquire for additional option(s)

Optimum Volume: 0.5 mL

2-8°C

-20°C

-70°C

3 days

1.5 years

1.5 years

Reporting units: ng/mL

Method: Chemiluminescence

Biological or Clinical Significance:

GH testing is not recommended for general screening. It is primarily ordered on those with symptoms of growth hormone abnormalities, as a follow-up to other abnormal hormone test results, or to help evaluate pituitary function.

Growth hormone tests are used to help identify excess or diminished GH production. They are part of the diagnostic work-up required to find a cause for abnormal hormone production. GH can be measured to assess the success of therapy for acromegaly or gigantism.

An IGF-1 (Insulin-like growth factor - 1) test is often ordered along with GH. IGF-1 mirrors GH excesses and deficiencies, but its level is stable throughout the day, making it a useful indicator of average GH levels.

Care must be taken when interpreting results of GH tests. Since GH is released by the pituitary in bursts, random GH levels are not very useful. There is too much overlap between abnormal results and normal daily variation. GH levels will be higher first thing in the morning and will increase with exercise and stress. It is more useful to compare GH results with IGF-1 results and evaluate responses to GH stimulation or suppression.

Principle of Test Method:

The growth hormone assay is an automated solid-phase, two-site chemiluminescent immunometric assay.