GROWTH HORMONE SERUM/ PLASMA

London Health Sciences Centre

Pathology and Laboratory Medicine

Orderable - GH

Turn Around Time: 4 hours

Alternate Name(s):

Human Growth Hormone hGH

Specimen:

9		
-	S.	

Laboratory: Core Lab



Requisition: GENERAL LABORATORY REQUISITION

•••	
•	
ㅁ	
	١.

Method of Analysis: Roche Electrochemiluminescence



Test Schedule: As required

Adult	Pediatric		
4.5 mL Light Green top	0-2 years: 0.5 mL Light Green top		
Vacutainer tube	Microtainer		
	2-10 years: 3 mL Light Green top		
	Vacutainer tube		
Red, Gold, or Lavender (EDTA) top tubes are also acceptable			

Collection Information:

Minimum volume of plasma or serum required is 700 μL for adult samples or 200 μL for pediatric samples.

Reference Ranges:

Male			
Age	<u>Range</u>		
0 – 10 years:	≤ 6.3 μg/L*		
11 – 17 years:	≤ 10.8 μg/L*		
21 – 77 years:	≤ 2.5 µg/L*		

Female			
Age	<u>Range</u>		
0 – 10 years:	≤ 7.8 μg/L*		
11 – 17 years:	≤ 8.1 μg/L*		
21 – 77 years:	≤ 9.9 µg/L*		

*Basal levels of growth hormone do not have diagnostic relevance. Stimulation or suppression tests are needed to diagnose a growth hormone-related disorder.

Children: \geq 6 µg/L following provocative testing is not consistent with growth hormone deficiency





Pathology and Laboratory Medicine

Comments:

Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. > 5 mg/day) until at least 8 hours after the last biotin administration.

This assay is affected by pegvisomant (a highly selective growth hormone receptor antagonist).

This assay is not suitable for pregnant women due to cross-reactivity with placental growth hormone.